

# Environment Agency permitting decisions

## Bespoke permit

We have decided to grant the permit for **Spring Farm Poultry Unit** operated by **Parton's Poulets Limited**.

The permit number is **EPR/TP3439RJ**.

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.

## Description of the main features of the Installation

The main features of the installation are as follows.

*The installation is centred on National Grid Reference SJ 51055 35275. The installation is located approximately 800 metres to the north of the village of Whixall and 1.7 km north east of the village of Dobson's Bridge.*

The installation is operated by Parton's Poulets Limited.

The farm will operate with a maximum capacity of **142,500** broilers

The initial phase of installation operation will be with a maximum of 112,500 broiler places and include four poultry buildings numbered 1 to 4.

The second phase will be up to 142,500 broiler places and the installation will then consist of three poultry buildings with two of the original poultry buildings (poultry buildings 2 and 3) converted into one larger poultry building (poultry building 2).

Hence the facility is required to be permitted as a scheduled activity under Environmental Permitting Regulations as follows;

*Section 6.9 A (1) (a) (i) Rearing of poultry intensively in an installation with more than 40,000 places*

**In general, the installation is to re-utilise and modernise existing broiler farming facilities already existing within the installation boundary.**

The final design for 142,500 bird place will include all poultry houses complete with high velocity ridge fans on all poultry buildings. A pre-operational condition has been added to ensure our written approval for final poultry building ventilation and drainage design.

# Key issues of the decision

## Industrial Emissions Directive (IED)

The Environmental Permitting (England and Wales) (Amendment) Regulations 2013 were made on the 20 February 2013 and came into force on 27 February 2013. These Regulations transpose the requirements of the Industrial Emissions Directive (IED).

This permit implements the requirements of the EU Directive on Industrial Emissions.

## Environmental Impacts

### Ammonia Emissions

There are three Special Area of Conservation sites (SAC's) and two Ramsar sites within the relevant screening distance 10km of the installation boundary. The closest sites are Midland Meres and Mosses Phase 2 Ramsar and Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC, both within 1.5 km of the installation boundary.

There are three Sites of Special Scientific Interest within 5 km screening criteria. In addition there are three other conservation sites within 2 km of this installation.

**All the habitat sites screen out based on data in our Ammonia Screening Tool version 4.4 (ASTv4.4) ammonia screening assessment, dated 20/11/15 except the following two sites:**

1. Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC,
2. Midland Meres and Mosses Phase 2 Ramsar

### 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.

Initial screening using the Ammonia Screening Tool v4.4 dated 20/11/15 indicated that the PCs for the following European sites are predicted to be less than 4 % Critical Level for ammonia, acid and N deposition therefore it is possible to conclude no damage. The results of the ammonia screening tool v 4.4 are given in the tables below. A precautionary level of  $1\mu\text{g}/\text{m}^3$  for the critical level of ammonia has been used for the screening. The screening indicates that beyond **2,334 m** distance, the Process Contribution at the European sites is less than 4 % of the  $1\mu\text{g}/\text{m}^3$  critical level for ammonia. In this case the European Sites below in Table 1 are beyond this distance.

**Table 1 – distance from source**

Site	Distance (m)
Brown Moss SAC	6,315
West Midlands Mosses SAC	7,561
Midland Meres and Mosses Phase 1 Ramsar	6,315

### Conclusion

The PCs for ammonia at these sites have been screened as insignificant. *It is therefore possible to conclude that no significant pollution will occur at these sites and no further assessment is required.*

Where a CLe of  $1\mu\text{g}/\text{m}^3$  is used, and the PC is assessed to be less than the 4 % insignificance threshold in these circumstances it is not necessary to consider nitrogen deposition or acidification critical load values. In these cases the  $1\mu\text{g}/\text{m}^3$  level used has not been confirmed, but it is precautionary.

## Detailed Modelling

### **For Midland Meres and Mosses Phase 2 Ramsar and Fenn's, Whixall, Bettisfield, Wem and Cadney Mosses SAC the following applies:**

*The applicant has progressed directly to detailed modelling for ammonia impacts for these sites.*

The applicant modelling report dated 25<sup>th</sup> August 2015 confirms the following basis for the modelling. A precautionary Critical Level of 1.0 µg/m<sup>3</sup> has been assumed for Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SAC and Midlands Meres and Mosses Phase 2 Ramsar site.

As a Critical Level of 1.0 µg/m<sup>3</sup> has been assumed for all conservation sites included in the study, an assessment of process contributions to nutrient nitrogen and acid deposition at the identified receptors is not provided as part of this assessment. This Critical Level is based on potential presence of lichens and bryophytes.

The results are as follows. It should be noted that the two European sites cover a **common** area at location closest to the new proposed farm. The process contributions below are the maximum levels at the modelled receptors at National Grid Reference 350055,335731.

**Table 2 - Ammonia Emissions**

Site	Critical Level (Cle ) Ammonia µg/m <sup>3</sup>	PC µg/m <sup>3</sup>	PC % Critical Level
1. Fenn's, Whixall,Bettisfield, Wem & Cadney Mosses SAC, 2. Midland Meres and Mosses Phase 2 Ramsar	1	0.038	3.8

### **Conclusion**

*On that basis all process contributions are less than 4 % of relevant critical level*

**The PCs for ammonia at these sites has been screened as insignificant. It is therefore possible to conclude that no significant pollution will occur at these sites and no further assessment is required.**

Where a CLe of 1µg/m<sup>3</sup> is used, and the PC for ammonia is assessed to be less than the 4 % insignificance threshold in these circumstances it is not necessary to consider nitrogen deposition or acid deposition Critical Load values

### **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.

Initial screening using the Ammonia Screening Tool v4.4 dated 20/11/15 indicated that the PCs for the following SSSIs are predicted to be less than 20% CLe/CLo 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.

A precautionary CLe of 1µg/m<sup>3</sup> for ammonia has been used during the screening.

Screening indicates that beyond **806 m** distance, the PC's at SSSI's are less than 20% of the 1µg/m<sup>3</sup> critical level for ammonia. In this case the SSSIs below in Table 3 are beyond this distance.

**Table 3 – distance from source**

Site	Distance (m)
Prees Heath SSSI	4721
Prees Branch Canal SSSI	1797
Fenn's, Whixall, Bettisfield, Wem & Cadney Mosses SSSI	1100

**Conclusion**

The PCs for ammonia at these sites has been screened as insignificant. *It is therefore possible to conclude that no significant pollution will occur at these sites and no further assessment is required.*

Where a CLe of  $1\mu\text{g}/\text{m}^3$  is used, and the PC is assessed to be less than the 20% insignificance threshold in these circumstances it is not necessary to consider nitrogen deposition or acid deposition critical load values. In these cases the  $1\mu\text{g}/\text{m}^3$  level used has not been confirmed, but it is precautionary.

**Ammonia assessment - LWS/AW/LNR/NNR.**

There are two local wildlife sites (LWS) and one national nature reserve (NNR) within 2 km of this installation. 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, as set out above, using results of the Ammonia screening Tool 4.4 dated 20/11/15. The PCs on these sites for ammonia, acid and nitrogen deposition from the application site are under the 100% significance threshold and can be screened out as having no likely significant effect.

A precautionary CLe of  $1\mu\text{g}/\text{m}^3$  for ammonia has been used during the screen.

Screening indicates that beyond **279 m** distance, the PC's at conservation sites are less than 100 % of the  $1\mu\text{g}/\text{m}^3$  critical level for ammonia. In this case all the other conservation sites listed below in Table 4 are beyond this distance.

**Table 4 – distance from source**

Site	Distance (m)
Fenn's, Whixall and Bettisfield Mosses NNR	1049
Prees Branch Canal Reserve LWS	1792
Marl Allotment LWS	1010

**Conclusion**

The PCs for ammonia at these sites listed above have been screened as insignificant. It is therefore possible to conclude that no significant pollution will occur at these sites and no further assessment is required.

Where a CLe of  $1\mu\text{g}/\text{m}^3$  is used, and the process contribution is assessed to be less than the 100% insignificance threshold in this circumstance it is not necessary to consider nitrogen deposition or acidification critical load values. In these cases the  $1\mu\text{g}/\text{m}^3$  level used has not been confirmed, but it is precautionary.

**Biomass Boilers**

The application includes one biomass boiler with a thermal input capacity of **0.99 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 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;
- A. the aggregate net rated thermal input is less than 0.5MW<sub>th</sub>, or;
  - B. the aggregate boiler net rated thermal input is less than or equal to 4 MW<sub>th</sub>, and no individual boiler has a thermal input greater than 1 MW<sub>th</sub>, 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 points

This is in line with the Environment Agency's document "Air Quality and Modelling Unit C1127a Biomass firing boilers for intensive poultry rearing", and an assessment has been undertaken to consider the proposed addition of the biomass boiler.

**The Environment Agency's risk assessment has shown that the biomass boilers complies with requirements of criteria B above, as the single biomass boiler is < 1 MW thermal input capacity.**

The closest relevant sensitive receptor is approximately 65 metres from the biomass boiler stack.

The applicant has confirmed that the biomass boiler fuel will be limited to virgin wood and not include waste wood.

## 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 applicant 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 applicant** 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 is within the application supplementary information.

It includes completion of H5 template plus an installation boundary with locations of farm buildings, drains, diesel tank and dirty water tank.

The surrounding land is predominantly used for arable farming. There are some small villages in the area. There is no record of historic land contamination. The site is not within a flood zone.

Our technical review of this specific land usage is as follows.

- There is no record of installation area land contamination.
- The installation site was previously utilised for a broiler farm under permit EPR/NP3330UQ between 2008 and 2013. The existing buildings have remained unused since 2013. There are no known environmental incidents linked to this permit.
- The site is not within a Groundwater Protection Zone.

Therefore the conclusion is there is a low risk of historic groundwater and land contamination due to former activities within installation boundary.

**Therefore, although condition 3.1.3 is included in the permit, no groundwater monitoring will be required at this installation as a result, and 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

There are sensitive receptors within 400 metres of the installation (excluding the farmers own residential property). The closest sensitive receptor is approximately 50 metres to the northwest of the installation at National Grid Reference SJ 51040 35735.

*In accordance with our guidance EPR 6.09, an Odour Management Plan is required when sensitive receptors are beyond 400 metres.*

An Odour Management Plan (OMP) is included within the application supporting information. It includes an odour risk assessment, details of odour control measures and complaints procedure.

The revised OMP accepted with the duly making responses includes a map giving locations of sensitive receptors within 400 metres of the installation boundary plus commitment to daily site boundary checks and

additional detail on a list of scenarios with potential elevated odour levels beyond the installation boundary. Furthermore the applicant has provided additional contingency plans with remedial actions to minimise odour pollution for each of these potential abnormal scenarios.

We have formally assessed the OMP with respect to our Intensive Farming EPR 6.09 guidance, our top tips guidance and Poultry Code of Practice Checklist.

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 applicant.

Overall there is the potential for odour pollution from the installation beyond the installation boundary. However the risk of odour beyond the installation boundary is not considered significant

## **Noise**

There are sensitive receptors within 400 metres of the installation (excluding the farmers own residential property). *In accordance with our guidance EPR 6.09, a Noise Management Plan is required when sensitive receptors are beyond 400 metres.*

A Noise Management Plan (NMP) is included within the application supporting information. It includes a noise risk assessment, details of noise control measures and complaints procedure.

Operations with the most potential to cause noise nuisance have been assessed as those involving vehicle movements, ventilation fans, biomass boiler flue, feeding systems and broiler catching, building clean outs plus noise emissions from the standby generator, alarm systems and repair work.

We have assessed the NMP and have accepted it as satisfactory to minimise noise pollution beyond the installation boundary.

Overall there is the potential for noise from the installation beyond the installation boundary. However the risk of noise beyond the installation boundary is considered acceptable.

## Annex 1: decision checklist

This document should be read in conjunction with the application and supporting information and permit.

Aspect considered	Justification / Detail	Criteria met Yes
<b>Receipt of submission</b>		
Confidential information	A claim for commercial or industrial confidentiality has <i>not</i> been made	✓
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on commercial confidentiality.	✓
<b>Consultation</b>		
Scope of consultation	<p>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.</p> <p>The application was sent for consultation with</p> <ul style="list-style-type: none"> <li>• Shropshire Council Environmental Health department</li> <li>• Health and Safety Executive (HSE).</li> <li>• Public Health England/Director of Public Health</li> </ul> <p>There are sensitive receptors within 100 metres from the installation boundary. As such a dust assessment and associated consultation with Public Health England/Director of Public Health is required.</p>	✓
Responses to consultation and web publicising	The web publicising and consultation responses (Annex 2) were taken into account in the decision. No points of concern were received from the consultation responses. The decision was taken in accordance with our guidance.	✓
<b>Operator</b>		
Control of the facility	We are satisfied that the applicant (now the applicant) 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 applicant.	✓
<b>European Directives</b>		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
<b>The site</b>		
Extent of the site of the facility	The applicant 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 applicant is required to carry on the permitted activities within the site boundary.	✓
Site condition report	<p>The applicant has provided a description of the condition of the site.</p> <p>We consider this description is satisfactory. Please refer to key issues, section 'Groundwater and soil monitoring'. As a result of further assessment, baseline data is not required. 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 screening 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 site has been carried out as part of the permitting process. We consider that the application will not affect the features of the site.</p> <p>The key issues section provides a list of these sites. In addition an ammonia emissions review is included in key issues section of this document.</p> <p>In conclusion installation environmental impacts on the surrounding habitat sites are considered not significant.</p> <p>An appendix 11 dated 25/11/15 has been sent to Natural England for sites</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>within England a separate Appendix 11 sent to NRW for sites within Wales. Both these appendices are for information only for the relevant sites. We have not formally consulted on the application. The decision was taken in accordance with our guidance</p>	
<b>Environmental Risk Assessment and operating techniques</b>		
Environmental risk	<p>We have carried out a risk assessment on behalf of the operator.</p> <p><b>See Key Issues section 'Biomass boiler' above for further explanation.</b></p>	✓
Environmental risk	<p>We have reviewed the applicant's assessment of the environmental risk from the facility. The applicant's risk assessment is satisfactory. The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment all emissions may be categorised as environmentally insignificant.</p> <p>The critical details of the assessment , including biomass boiler assessment, are covered in the key issues section of this decision document</p>	✓
Operating techniques	<p>We have reviewed the techniques used by the applicant and compared these with the relevant guidance notes.</p> <p>The applicant has confirmed that all farm facilities and operating techniques will be in compliance with our sector guidance EPR 6.09.</p> <p>General operating procedures include:</p> <ul style="list-style-type: none"> <li>• Feed selection is carefully selected with reference to pigs' growth curve. Phosphorous and protein levels are reduced over the growing period.</li> <li>• All poultry buildings will be well insulated for optimum animal health and the houses will use high velocity extraction fans to optimise odour dispersion.</li> <li>• Fugitive Emission controls include building maintenance, routine building clean downs, separate clean and dirty water drainage systems. Feed is stored within enclosed feed bins.</li> <li>• Storage facilities: there is one fuel tank which is bunded.</li> </ul> <p>The applicant has confirmed various improvements to the current installation facilities once the bird places exceed initial maximum capacity of 112,500. These improvements are summarised as follows:</p> <ul style="list-style-type: none"> <li>• Revised poultry house 2 – updated with high velocity roof extract ventilation</li> <li>• French drains surrounding updated poultry house 2 to provide attenuation for roof water.</li> <li>• Improved drainage for lightly contaminated yard water to the east and west of poultry houses. Such yard water will drain to dirty water tanks to provide attenuation.</li> </ul> <p>A review of the odour and noise management plans for this installation are covered in the key issues section of this document.</p> <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in the SGN EPR 6.09 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</p>	✓
<b>The permit conditions</b>		
Use of conditions other than those from the template	<p>Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template, which was developed in consultation with industry having regard to the relevant legislation.</p>	✓



Aspect considered	Justification / Detail	Criteria met
		Yes
Raw materials	We have specified limits and controls on the use of raw materials and fuels ; this is linked to biomass fuel for biomass boilers.	✓
Pre-operational conditions	Based on the information in the application, we consider that we need to impose one pre-operational condition. This relates to confirmation of final poultry building 2 ventilation and drainage plan above 112,500 bird places	
Incorporating the application	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. These descriptions are specified in the Operating Techniques table in the permit. The applicant has accepted the new modern conditions within the consolidated permit variation.	✓
Emission limits	We have decided that emission limits should be not set in the permit.	✓
<b>Applicant Competence</b>		
Environment management system (EMS)	There is no known reason to consider that the applicant will not have the management systems to enable it to comply with the permit conditions. The applicant has chosen to utilise their own management system without external certification. There is a summary of the EMS in supporting documentation (appendix 3). This gives the detail of their EMS normal operations, maintenance schedules, abnormal operations, complaints system, training, site security and accident management. The decision was taken in accordance with RGN 5 on Applicant Competence.	✓
Relevant convictions	The National Enforcement Database has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The applicant satisfies the criteria in RGN 5 on Applicant Competence.	✓
Financial provision	There is no known reason to consider that the applicant will not be financially able to comply with the permit conditions. The decision was taken in accordance with RGN 5 : Applicant 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 Public Health England dated 12/01/16
Brief summary of issues raised
No issues raised
Summary of actions taken or show how this has been covered
No relevant actions required.

**No other responses were received.**

This proposal was also publicised on the Environment Agency's website for 4 weeks (deadline for responses 20/01/16) but no representations were received during this period.