

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for **Seven Acre Farm** operated by **Mr Jamie Perry-Warnes, Mr David Perry-Warnes, and Mrs Jill Perry-Warnes.**

The permit number is **EPR/MP3837VQ**

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
- 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 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.

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 (in this permit condition 3.1.3 has been included). 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 (SCR) for Seven Acre Farm (received 05/05/15) demonstrated 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 baseline reference data for the soil and groundwater at the site at this stage, and although condition 3.1.3 is included in the permit no groundwater monitoring will be required.**

Ammonia assessment

The operator has applied for a permit to rear 4,250 production pigs > 30kg.

There is one Special Area of Conservation (SAC) within 10km of the installation. In addition there is one Site of Special Scientific Interest (SSSI) within 5km of the installation, and eight other nature conservation sites within 2km which are all Local Wildlife Sites (LWS).

Ammonia assessment – SAC/SPA/Ramsar sites

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 (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 10 km of the application.

Initial screening using the Environment Agency's Ammonia Screening Tool version 4.4 (AST4.4) indicated that the PC for ammonia for Norfolk Valley Fens SAC was >4% for an assigned CLe of 1 µg/m³, and there was potential for another farm to act in combination with Seven Acre Farm, therefore detailed modelling was required.

Detailed modelling (reference 'An Ammonia Concentration and Deposition Study for the Proposed Expanded Piggery at Seven Acres Farm, Saxthorpe, Norfolk' by ADAS UK Ltd, dated 26/03/15) has determined that the PC on the SAC for ammonia from the application site is under the 4% significance threshold and can be screened out as having no likely significant effect alone, and therefore no in-combination assessment is required. See results below.

Detailed modelling provided by the applicant has been audited in detail by our Air Quality Modelling and Assessment Unit (AQMAU) and we have confidence that we can agree with the report conclusions.

Table 1 – Ammonia emissions

Site	Critical level ammonia µg/m ³	Predicted PC µg/m ³	PC % of Critical level
Norfolk Valley Fens SAC	1*	0.015	1.5

* Critical level value taken from Air Pollution Information System (APIS) website (www.apis.ac.uk) – 28/01/15

Where a critical level of 1 µg/m³ is used, and the PC is assessed to be less than the 4% insignificance threshold in this circumstance it is not necessary to further consider PCs of nitrogen deposition or acid deposition against relevant critical load values.

No further assessment is necessary.

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 AST4.4 indicated that the PC for Edgefield Little Wood SSSI was >20%, and there was potential for another farm to act in combination with Seven Acre Farm, therefore detailed modelling was required.

Detailed modelling (reference 'An Ammonia Concentration and Deposition Study for the Proposed Expanded Piggery at Seven Acres Farm, Saxthorpe, Norfolk' by ADAS UK Ltd, dated 26/03/15) has indicated that the PC for Edgefield Little Wood SSSI is predicted to be less than 20% critical level/loads for ammonia, acid and nitrogen deposition therefore it is

possible to conclude no damage. The results of the detailed modelling are given in the tables below.

The ammonia modelling assessment has been audited in detail by our Air Quality Modelling and Assessment Unit and we have confidence that we can agree with the report conclusions.

Table 2 – 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
Edgefield Little Wood SSSI	1*	0.08	8

* Critical level value taken from Air Pollution Information System (APIS) website (www.apis.ac.uk) – 28/01/15

Where a critical level of $1 \mu\text{g}/\text{m}^3$ is used, and the PC is assessed to be less than the 20% insignificance threshold in this circumstance it is not necessary to further consider PCs of nitrogen deposition or acid deposition against relevant critical load values.

No further assessment is necessary.

Ammonia assessment - LWS/AW/LNR

There are 8 Local Wildlife Sites (LWS) within 2 km of Seven Acre 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 (version 4.4) has indicated that emissions from Seven Acre 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 1298 metres of the emission source. Screening indicates that beyond this distance, the PCs at the conservation sites are less than $1 \mu\text{g}/\text{m}^3$. Assigning a precautionary critical level of $1 \mu\text{g}/\text{m}^3$ the PCs are less than 100% of the CLe and therefore beyond this distance the PC is insignificant. In this case the following four LWS are beyond this distance.

Table 3 – distance from source

Site	Distance (m)
New Covert LWS	1722
Blackwater Valley LWS	1783
Old Carr LWS	1335
Mossymere Wood LWS	1790

Where a critical level of $1 \mu\text{g}/\text{m}^3$ is used, and the PC is assessed to be less than the 100% insignificance threshold in this circumstance it is not necessary to further consider PCs of nitrogen deposition or acid deposition against relevant critical load values.

The PCs at 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.

For the following sites this farm has been screened out, using the ammonia screening tool (version 4.4). The predicted PC on the LWS 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.

Table 4 - Ammonia emissions

Site	Critical level ammonia $\mu\text{g}/\text{m}^3$	Predicted PC $\mu\text{g}/\text{m}^3$	PC % of critical level
Moor Hall LWS	3*	1.246	41.5
Tan Office Farm LWS	3*	1.781	59.4

* CLe 3 applied as no protected lichen or bryophytes species were found when checking easimap layer

Table 5 – Nitrogen deposition

Site	Critical load kg N/ha/yr [1]	Predicted PC kg N/ha/yr	PC % of critical load
Moor Hall LWS	10*	6.47	64.7
Tan Office Farm LWS	10*	9.249	92.5

* Critical load values taken from APIS website (www.apis.ac.uk) – 28/01/15

Table 6 – Acid deposition

Site	Critical load keq/ha/yr [1]	Predicted PC keq/ha/yr	PC % of critical load
Moor Hall LWS	1.84	0.462	25.1
Tan Office Farm LWS	1.84	0.661	35.9

* Critical load values taken from APIS website (www.apis.ac.uk) – 28/01/15

No further assessment is required.

Initial screening using AST4.4 indicated that the PCs for Corpusty Fen LWS screened in for ammonia and nitrogen deposition, and the PCs for Dismantled Railway LWS screened in for nitrogen deposition, therefore detailed modelling was required.

The results of the detailed modelling supplied by the applicant as part of the application (reference 'An Ammonia Concentration and Deposition Study for the Proposed Expanded Piggery at Seven Acres Farm, Saxthorpe, Norfolk' by ADAS UK Ltd, dated 26/03/15) showed that the following sites have been screened out.

Detailed modelling provided by the applicant has been audited in detail by our Air Quality Modelling and Assessment Unit (AQMAU) and we have confidence that we can agree with the report conclusions.

Table 7 - Ammonia emissions

Site	Critical level ammonia $\mu\text{g}/\text{m}^3$	Predicted PC $\mu\text{g}/\text{m}^3$	PC % of critical level
Corpusty Fen LWS	3*	1.077	35.9

* CLe 3 applied as no protected lichen or bryophytes species were found when checking easimap layer

Table 8 – Nitrogen deposition

Site	Critical load kg N/ha/yr [1]	Predicted PC kg N/ha/yr	PC % of critical load
Corpusty Fen LWS	10	8.393	83.9
Dismantled Railway LWS	10	5.955	59.5

* Critical load values taken from APIS website (www.apis.ac.uk) – 28/01/15

No further assessment for these sites is required

Odour

There are several sensitive receptors within 400 metres of the installation and therefore an odour management plan has been prepared. These consist of residential properties as follows:

The nearest 2 sensitive receptors are located approximately 270 metres (m) south of the unit. However these are the permit holder's farm stead (Hill Farm House and Hill Farm Barn. There are 2 receptors approximately 350m to the south east, Great Farm Cottages 1 and 2, and one, Prospect House, approximately 350m to the west.

There is no history of odour complaints from local residents linked to the existing pig facility.

An Odour Management Plan has been submitted with this application. The OMP was updated in the schedule 5 response (received 17/06/15) providing more details of contingency plans and complaint procedures.

The OMP covers procedures in place to minimise odour from potential sources including feed selection, feed storage, ventilation design, carcass storage, cleaning out and slurry storage management.

Noise

There are sensitive receptors within 400 metres of the installation boundary as stated above in the odour review. The operator has hence provided a noise management plan with the application.

Operations with the most potential to cause noise nuisance have been assessed as those involving feeding pigs, feed delivery, pig movement, pig loading, mucking out, bedding pens, slurry tanker filling and emptying, manure management, delivery of supplies and materials and vehicle movement within the installation boundary.

The noise management plan covers control measures for each of these potential noise hazards.

There is no history of noise complaints linked to the existing pig farm operating below the EPR scheduled activity threshold.

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 insignificant.

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
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 permit implements the requirements of the EU Directive on Industrial Emissions.	✓
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 report	The operator has provided a description of the condition of the site. 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).	✓
Biodiversity, Heritage, Landscape and Nature Conservation	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. Please refer to section ‘Ammonia Assessment’ in Key Issues above. Appendix 11 was sent out for information only to Natural England on	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>02/06/15.</p> <p>In addition an Appendix 4 (dated 02/06/15) was completed for audit purposes.</p> <p>All documents have been saved on EDRM.</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 operating techniques are as follows:</p> <ul style="list-style-type: none"> • Pig housing is naturally ventilated with both roof and side outlets on all 5 houses • Manure is spread on land owned by the operator and also on land owned by third parties • Dirty wash water is collected in a tank and spread on operator owned land and also on land owned by third parties • Yard surface water from the muck pad drains to dirty water tank • Roof water and yard surface water drains to soakaways • Sealed and collision-protected feed storage bins • Mortalities are collected daily and stored in a secure container on site prior to removal off site by authorised contractors under the National Fallen Stock Scheme • Phosphorous and protein levels are reduced over the production and growing cycle by providing different feeds <p>The proposed techniques for priorities for control are in 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.</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>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
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	The National Enforcement Database has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The operator satisfies the criteria in RGN 5 on Operator Competence.	✓
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
North Norfolk District Council - Environmental Protection Service (received 16/06/15)
Brief summary of issues raised
Environmental Protection does not have records of complaints regarding this farm; therefore providing the farm are complying with their odour and noise management plans I have no concerns regarding the permitting of this facility.
Summary of actions taken or show how this has been covered
No action required

The Health and Safety Executive were also consulted but no response was received.

The application was also advertised on the www.gov.uk website, with a deadline of 11/06/15 for comments, but none were received.