

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Higher Stocklands Farm Pig Unit Operated by Mr Steve Larder and Mrs Julie Larder (operating as S & J Larder).

The permit number is EPR/HP3438VC

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

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 a condition relating to protection of soil, groundwater and 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 there is 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 the 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 Higher Stocklands Farm Pig Unit dated 5 June 2013 demonstrates 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 base line reference data for the soil and groundwater at the site at this stage.**

Ammonia Emissions

There are two Special Areas of Conservation (SAC), Special Protection Areas (SPA) and Ramsar sites located within 10km of the installation. There are two Sites of Special Scientific Interest (SSSI) located within 5 kilometres of the installation. There are also ten Local Wildlife Sites (LWS) 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 detailed modelling (report dated 11 June 2014) has determined that the Process Contribution (PC) on the SAC/SPA/Ramsar for ammonia 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.

The ammonia modelling assessment provided by the applicant has been audited and we have confidence that we can agree with the report conclusions.

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
Severn Estuary (SAC and SPA)	3*	0.020	0.7%
Somerset Levels and Moors (SPA and Ramsar)	1**	0.016	1.6%

* Citations were obtained and a critical level of 3 for ammonia was applied as lower species sensitive to ammonia concentrations are not present.

**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.

Table 2 – Nitrogen deposition

Site	Critical Load kg N/ha/yr	PC Kg N/ha/yr	PC % Critical Load
Severn Estuary (SAC and SPA)	20	0.102	0.5%

For the Severn Estuary no further assessment of acidification is necessary because the Environment Agency audited spreadsheet indicates that the absence of information to support the occurrence of direct toxic damage. The application of a critical level is not defensible at this time.

Ammonia Assessment – SSSI's

The following trigger thresholds have been applied for assessment of SSSI's. 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 detailed modelling has indicated that the PC for 'Catcott, Edington, and Chilton Moors' and 'Bridgwater Bay' SSSI is predicted to be less than 20% Critical Level for ammonia 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.

The ammonia modelling assessment has been audited and we have confidence that we can agree with the report conclusions.

Table 3 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
Catcott, Edington, and Chilton Moors SSSI	3*	0.022	0.7%
Bridgwater Bay SSSI	3	0.020	0.7%

*Natural England confirmed that a Cle of $3 \mu\text{g}/\text{m}^3$ for ammonia should be applied to the SSSI as lower species sensitive to ammonia concentrations are not present.

Table 4 – Nitrogen deposition

Site	Critical Load kg N/ha/yr	PC Kg N/ha/yr	PC % Critical Load
Catcott, Edington, and Chilton Moors SSSI	5	0.113	2.3%
Bridgwater Bay SSSI	20	0.102	0.5%

For Bridgwater Bay, no further assessment of acidification is necessary because the Environment Agency audited spreadsheet indicates that the absence of information to support the occurrence of direct toxic damage. The application of a critical level is not defensible at this time.

Table 5 - Acid deposition

Site	Critical Load kg N/ha/yr	PC Kg N/ha/yr	PC % Critical Load
Catcott, Edington, and Chilton Moors SSSI	0.494	0.063	12.8%

Ammonia assessment - LWS

There are ten Local Wildlife Sites (LWS) within 2 km of Higher Stocklands 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.

Screening using Ammonia Screening Tool v4.4 has indicated that emissions from Higher Stocklands Farm will only have a potential impact on sites with a critical level of 1 µg/m³ if they are within 1469 m 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 6 – distance from source

Site	Distance (m)
Puriton Cowslip Field	1,819
Upper Combe Plantation	2,047
Stoning Pound Field South and Stoni	1,978
Woolavington Road and Fields North	1,472
Skylark Meadows	1,353
South Hills Wood	1,519
Cossington Park Gardens	1,993

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 been screened out, as set out above, using results of the detailed modelling supplied by the applicant as part of the application.

Table 7 - Ammonia Emissions LWS's and AW

Site	Critical Level Ammonia µg/m ³	PC µg/m ³	PC % Critical Level
Orchard at Bawdrip LWS	3*	0.769	25.6%
Little Wall Lane	3*	1.027	13.8%
New Ground Covert	1**	0.107	10.7%

* This is the same level used in the Environment Agency pre-application report.

**A precautionary critical level of 1 µg/m³ has been assigned to this site.

Table 8 - Nutrient enrichment

Site	Critical Load nutrient enrichment kg N/ha/yr	PC Kg N/ha/yr	PC % Critical Load
Orchard at Bawdrip	10	5.993	59.9%
Little Wall Lane	20	8.003	40.0%

Table 9 – Acid deposition

Site	Critical Load nutrient enrichment kg N/ha/yr	PC Kg N/ha/yr	PC % Critical Load
Orchard at Bawdrip	10.92	1.602	14.7
Little Wall Lane	4.72	2.158	45.7

No further assessment for these sites is required.

Annex 1 the decision checklist

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 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.	✓
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).	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Biodiversity, Heritage, Landscape and Nature Conservation	<p>The application is within the relevant distance criteria of sites of nature conservation.</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 site.</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 facility meets BAT in the following ways:</p> <ul style="list-style-type: none"> • Nipple drinkers are used and designed to prevent leakage; • All pens have solid floors with straw bedding; • Manure is removed regularly and spread on the Operator's land; • Odour is reduced by keeping pens as clean as possible and ammonia production is reduced by optimising protein levels in the diet. <p>The proposed techniques are in line with the benchmark levels contained in the TGN 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>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	These descriptions are specified in the Operating Techniques table in the permit.	
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 advertising responses

1) Local Authority Environmental Health

Response received from
Environmental Health – Sedgemoor District Council (25/07/2014)
Brief summary of issues raised
<p>The response included the following points:</p> <ul style="list-style-type: none"> • There have been allegations of odour nuisance caused by Mr Larder’s pig units but these have never been substantiated as there are numerous malodorous sources in the area. • There is a planning condition on ‘lower Stocklands’ new pig unit relating to odour. Complaints are also received about ‘higher Stocklands Farm and odour’. • It was recommended that the Environment Agency consider issues of odour and how those caused by pig slurry can be controlled.
Summary of actions taken or show how this has been covered
<p>The Environment Agency notes the recommendation to consider odour emissions. Likely impacts have been assessed during the determination as unlikely to have a significant impact and therefore we have included standard conditions which require the operator to action any emissions management plan should a substantiated negative impact be notified. The management plan may then require monitoring to be implemented.</p> <p>Conditions 3.3.1 concerning odour is included in the permit.</p>

2) Public Health England

Response received from
Public Health England
Brief summary of issues raised
<p>The installation has the potential to cause pollution such as fugitive emissions (ammonia, bio-aerosols and particulates) and pollution to ground and surface water in the form of leachate and spillages. Furthermore, potential exists to cause nuisance in respect of odour and noise from the operation itself and any application being granted needs to ensure these are managed.</p> <p>Provided the installation complies with the Regulatory requirements and the regulator is satisfied that the techniques proposed by the applicant represent best available technique (BAT), there is unlikely to be any significant adverse impact upon public health. The HPA position statement on intensive farming describes the main public health risks from this type of activity, which we would expect to be appropriately managed and regulated.</p>
Summary of actions taken or show how this has been covered
<p>Conditions 3.1.1, 3.2.1, 3.3.1, and 3.4.1, concerning noise, odour and fugitive emissions included in permit. Likely impacts have been assessed during the determination as unlikely to have a significant impact and therefore we have included standard conditions which require the operator to action any emissions management plan should a substantiated negative impact be notified. The management plan may then require monitoring to be implemented.</p>

Reponses not received

The Health and Safety Executive (HSE), Food Standards Agency (FSA) were also consulted; however, consultation responses from these parties were not received.

This proposal was also publicised on our website between 23/07/14 and 20/08/14 and no representations were received.