

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Killock Farm Pig Unit operated by Mr Mark Vickery.

The permit number is EPR/NP3134ND.

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

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 Killock Farm Pig Unit (dated 03/11/2015) 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 Impact Assessment

The operation of the farm will be in accordance with SGN EPR6.09 'How to comply with your environmental permit for intensive farming (version 2)' Technical Guidance Note. The Operator has proposed the following techniques in order to control emissions:

- the solid floor housing comprises of a scrape through area that prevent ponding or build up of urine and a lying area (bedded with straw);

- quality regularly inspected to ensure litter does not become excessively wet or dry;
- front of pens are cleaned out by scraping on a daily basis; and
- all houses naturally ventilated.

There are two Special Area of Conservation (SAC) located within ten kilometres of the installation. There are six Sites of Special Scientific Interest (SSSIs) within five kilometres and 12 other nature conservation sites within two kilometres of the installation.

Ammonia Assessment – SACs

The following trigger thresholds have been designated for assessment of European sites.

- if the process contribution (PC) is below 4% of the relevant critical level (CL_e) or critical load (CL_o) then the farm can be permitted with no further assessment;
- where this threshold is exceeded an assessment alone and in combination is required; and
- an overlapping in combination assessment will be completed where existing farms are identified within 10 km of the application.

Initial screening using the ammonia screening tool version 4.4 has indicated that emissions from Killock Farm Pig Unit will only have a potential impact on the SACs with a precautionary CL_e of 1 µg/m³ if they are within 4,045 metres of the emission source.

Initial screening indicates that beyond 4,045 m the PC is less than 0.04µg/m³ (i.e. less than 4% of the precautionary 1µg/m³ critical level) and therefore beyond this distance the PC is insignificant. Culm Grassland SAC is beyond this distance (see table below) and therefore screens out of any further assessment.

Where the precautionary level of 1µg/m³ is used, and the process contribution is assessed to be less than 4% the site automatically screens out as insignificant and no further assessment of critical load is necessary. In this case the 1µg/m³ level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no likely significant effect.

Table 1 – SAC Assessment

Name of SAC	Distance from site (m)
Culm Grassland	5,910

Screening using the ammonia screening tool (version 4.4) has determined that the PC on the SAC for ammonia, acid and nitrogen 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.

Table 2 – Ammonia emissions

Site	Critical level ammonia $\mu\text{g}/\text{m}^3$	Predicted PC $\mu\text{g}/\text{m}^3$	PC % of Critical level
Tintagel Marsland Clovelly Coast SAC	3*	0.049	1.6

* Natural England advised that a CLe of 3 for ammonia should be applied across the Tintagel Marsland Clovelly Coast.

Table 3 – Nitrogen deposition

Site	Critical load kg N/ha/yr [1]	Predicted PC kg N/ha/yr	PC % of critical load
Tintagel Marsland Clovelly Coast SAC	10	0.255	2.6

Note [1] Critical load values taken from Air Pollution Information System (APIS) website (www.apis.ac.uk)

Table 4 – Acid deposition

Site	Critical load keq/ha/yr [1]	Predicted PC keq/ha/yr	PC % of critical load
Tintagel Marsland Clovelly Coast SAC	1.351	0.018	1.3

Note [1] Critical load values taken from APIS website (www.apis.ac.uk)

No further assessment is necessary.

Ammonia Assessment – SSSIs

The following trigger thresholds have been applied for the 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 is required; and
- an in-combination assessment will be completed to establish combined PCs for all existing farms identified within 5 km of the application.

Initial screening indicated that beyond 1,689 metres the PC is less than $0.2 \mu\text{g}/\text{m}^3$ (i.e. less than 20% of the precautionary $1 \mu\text{g}/\text{m}^3$ critical level) and therefore beyond this distance the PC is insignificant. The following SSSIs are beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of $1 \mu\text{g}/\text{m}^3$ is used, and the process contribution is assessed to be less than 20% the site automatically screens out as insignificant and no further assessment of critical load is necessary. In this case the $1 \mu\text{g}/\text{m}^3$ level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no likely damage to these sites.

Table 5 – SSSI Assessment

Name of SSSI	Distance from site (m)
Steeple Point to Marsland Mouth	3,617
Duckpool to Furzey Cove	3,234
Bude Coast	3,704
Coombe Mill	3,128
Lymsworthy Meadows	3,781
Grimscott	4,330

Ammonia Assessment – LWS/AW

The following trigger thresholds have been applied for the assessment of local wildlife sites (LWS) and ancient woodland (AW).

- if the process contribution (PC) is below 100% of the relevant critical level (CL_e) or critical load (CL_o) using the ammonia screening tool (version 4.4); and
- if further modelling shows the PC is < 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 Killock Farm Pig Unit will only have a potential impact on sites with a critical level of 1 µg/m³ if they are within 705 metres of the emission. Screening indicates that beyond this distance, the PC at conservation sites is less than 1 µg/m³. 1 µg/m³ is 100% of the 1 µg/m³ CL_e and therefore beyond this distance the PC is insignificant. In this case all LWS and AW in the table below are beyond this distance.

Table 6 – LWS and AW Assessment

Site	Distance (m)
Hessafoord, Northcott Hill (LWS)	1,087
Norton, Hershams and Newleigh (LWS)	1,785
Woodford Woods & Coombe Valley (LWS)	1,641
Lee/Stowe Woods (AW)	1,800
Unnamed Woodland (AW)	1,081
Hessafoord Wood (AW)	1,494
Norton Wood (AW)	1,806
Hunthill Wood (AW)	1,196

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 site this farm has been screened out, using the ammonia screening tool (version 4.4). The predicted PC on the AW 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 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
Tiscott Wood (AW)	3*	1.009	33.6

* 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
Tiscott Wood (AW)	10	5.239	52.4

Note [1] Critical load values taken from APIS website (www.apis.ac.uk)

Table 9 – Acid deposition

Site	Critical load keq/ha/yr [1]	Predicted PC keq/ha/yr	PC % of critical load
Tiscott Wood (AW)	1.32	0.374	28.3

Note [1] Critical load values taken from APIS website (www.apis.ac.uk)

No further assessment is required.

Tiscott Wood LWS

Screening using the ammonia screening tool (version 4.4) indicated that emissions from Killock Farm Pig Unit the predicted PC on Tiscott Wood LWS for ammonia, acid and nitrogen deposition are above the 100% significance threshold and therefore could have a significant effect.

However, Area consulted with the council Countryside Management team who stated that,

‘The woodland that falls to the Countryside team to manage all falls south of the A39 as the farm is to the north of the tip and road I do not believe there is likely to be any impact from the farm on the site.’ (email ‘Application bespoke supporting documents Confirmation no additional modelling’ saved on EDRM, dated 25/09/2015)

Therefore, detailed modelling was not carried out and no further assessment was required.

Dust (including bioaerosols) control measures

The applicant included the following measures to ensure that dust (including bioaerosols) emissions from the installation are minimised:

- All dry feed ingredients are stored in covered hoppers and bins.
- Blower and vacuum type delivery vehicles.

- Farm buildings located between the feed delivery point and the nearest sensitive receptors.
- All feed mixing operations are carried out within an enclosed building with the doors shut.
- Part of the herd is fed liquid diets which reduces dust potential.
- Regular maintenance of ventilation systems to ensure that emissions from point sources will be at a height where dispersal is maximised.
- All yards kept clean.
- All pens and stock checked daily for cleanliness.
- Any spillages e.g. feed, cleaned up promptly.

We consider the control measures in place are appropriate to minimise the potential for emissions of dust from the installation in line with the Sector Guidance Note 6.9 for intensive farming.

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 Regulatory Guidance Note (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.	✓
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.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	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	<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>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p> <p>An Appendix 11 was completed and sent to Natural England ‘for information only’ on 03/02/2016.</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 proposed techniques for priorities for control are in line with the benchmark levels contained in the SGN6.09 ‘How to comply with your environmental permit for intensive farming (version 2)’ and we consider them to represent appropriate techniques for the facility.</p>	✓
The permit conditions		
Improvement	Based on the information on the application, we consider	

Aspect considered	Justification / Detail	Criteria met
		Yes
conditions	<p>that we need to impose an improvement condition (IC1).</p> <p><i>The slurry storage shall be covered in line with the requirements of EPR 6.09 Sector Guidance Note How to comply with your environmental permit for intensive farming, Version 2 – section 3.2.</i></p> <p>Date of completion - 31/12/19.</p>	
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.</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.

Response received from
Cornwall Council Environmental Health – 28/01/2016
Brief summary of issues raised
No comments on the proposal.
Summary of actions taken or show how this has been covered
None required.

Response received from
Public Health England – 15/02/2016
Brief summary of issues raised
Risk assessments have been completed to satisfaction.
Summary of actions taken or show how this has been covered
None required. Risk assessments submitted with application and tied in through Operating Techniques table S1.2.

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

The proposal was also web publicised on the Environment Agency's website between 29/01/16 to 26/02/16, but no representations were received during this period.