Permitting decisions

Bespoke permit

We have decided to grant the permit for Horwell Barton Farm Pig Unit operated by Mr David Pennington, Mrs Valarie Pennington and Mrs Elsa Dunn.

The permit number is EPR/QP3337YD.

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 provides a record of the decision making process. It:

- highlights key issues in the determination;
- summarises the decision making process in the decision checklist to show how all relevant factors have been taken into account; and
- shows how we have considered the consultation responses.

Unless the decision document specifies otherwise we have accepted the Applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit. The introductory note summarises what the permit covers.

Key issues of the decision

Intensive Rearing of Poultry or Pigs BAT Conclusions

The new Best Available Techniques (BAT) Reference Document (BREF) for the Intensive Rearing of Poultry or Pigs (IRPP) was published on the 21st February 2017. There is now a separate BAT Conclusions document which sets out the standards that permitted farms will have to meet.

The BAT Conclusions document is as per the following link:

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D0302&from=EN

Now that the BAT Conclusions are published, all new installation farming permits issued after the 21st February 2017 must be compliant in full from the first day of operation.

There are some new requirements for permit holders. The Conclusions include BAT-Associated Emission Levels (BAT-AELs) for ammonia emissions which will apply to the majority of permits, as well as BAT-AELs for nitrogen and phosphorous excretion.

For some types of rearing practices, stricter standards will apply to farms and housing permitted now that the new BAT Conclusions are published.

BAT Conclusions Review

There are 34 BAT Conclusion measures in total within the BAT Conclusions document dated 21st February 2017.

We sent a Schedule 5 Notice requiring the Applicant to confirm that the new Installation complies in full with all BAT Conclusion measures. The Applicant has confirmed their compliance with all measures in their document entitled 'Establishing Best Available Techniques' dated 26th October 2017 (received on 13/03/2018).

The following is a more specific review of some of the measures which the Applicant has applied to ensure compliance with the above key BAT measures:

BAT measure	**Applicant compliance measure**
BAT 3: Nutritional management – nitrogen excretion	The Applicant has confirmed it will demonstrate it achieves levels of nitrogen excretion below the required BAT-AEL of 4 kg N/animal place/year for the weaners (rearing of pigs up to 30 kg) and 13 kg N/animal place/year for the fattening pigs (production pigs over 30 kg). This confirmation is contained in the Applicant's 'Document 007 Non-Technical Summary' dated 26/10/17 (received on 22/02/18) which has been referenced in Table S1.2 Operating Techniques of the Permit. Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 4: Nutritional management – phosphorous excretion	The Applicant has confirmed it will demonstrate it achieves levels of phosphorous excretion below the required BAT-AEL of 2.2 kg P_2O_5 animal place/year for the weaners (rearing of pigs up to 30 kg) and 5.4 kg P_2O_5 animal place/year for the fattening pigs (production pigs over 30 kg). This confirmation is contained in the Applicant's 'Document 007 Non-Technical Summary' dated 26/10/17 (received on 22/02/18), which has been referenced in Table S1.2 Operating Techniques of the Permit. Table S3.3 of the Permit concerning process monitoring requires the

BAT measure	Applicant compliance measure
	Operator to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 24: Monitoring of emissions and process parameters – total nitrogen and phosphorous excretion	Table S3.3 of the permit, concerning process monitoring, requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions. The Operator will monitor using a calculation of the mass balance of nitrogen and phosphorus based on the feed intake, crude protein content of the diet, total phosphorus and animal performance.
BAT 25: Monitoring of emissions and process parameters – ammonia emissions	Table S3.3 of the permit, concerning process monitoring, requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 26: Monitoring of emissions and process parameters – odour emissions	The approved OMP includes the following details: • Odour from the Installation will be monitored daily throughout the first batch of pigs. If excessive odours are not detected during this period, routine monitoring will cease. Daily monitoring will resume in the event of a substantiated odour complaint arising. • Monitoring will be undertaken by the Operator in the morning to prevent the tests from being affected by odour desensitisation.
BAT 27: Monitoring of emissions and process parameters – dust emissions	Table S3.3 of the permit, concerning process monitoring, requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions. The Applicant has confirmed they will report the dust emissions to the Environment Agency annually by multiplying the dust emission factor by the number of pigs on site. This confirmation is contained in the Applicant's 'Document 007 Non-Technical Summary' dated 26/10/17 (received on 22/02/18) which has been referenced in Table S1.2 Operating Techniques of the Permit.
BAT 30: Ammonia emissions from pig houses	The Applicant has confirmed it will demonstrate it achieves levels of ammonia below the required BAT-AEL for the following pig types: • Pigs 7 – 30kg: 0.7 kg NH3/animal place/year; and • Pigs > 30kg: 5.65 kg NH3/animal place/year. The Installation does not include an air abatement treatment facility, hence the standard emission factor complies with the BAT-AEL.

Ammonia emission controls – BAT conclusion 30

The new BAT conclusions include a set of BAT-AEL's for ammonia emissions to air from animal housing for pigs. A BAT-AEL provides us with a performance benchmark to determine whether an activity is BAT.

'New plant' is defined as plant first permitted at the site of the farm following the publication of the BAT conclusions. All new bespoke applications issued after the 21st February 2017, including those where there is a mixture of old and new housing, will now need to meet the BAT-AEL.

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 2013. These Regulations transpose the requirements of the IED.

This permit implements the requirements of the European Union 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 Horwell Barton Farm Pig Unit (dated 26/10/17, received 22/02/18) 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 and although condition 3.1.3 is included in the permit no groundwater monitoring will be required.**

Odour

Intensive farming is by its nature a potentially odorous activity. This is recognised in our 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 guidance (http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297084/geho0110brsb-e-e.pdf).

Condition 3.3 of the environmental permit reads as follows:

"Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the Operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour."

Under section 3.3 of the guidance an Odour Management Plan (OMP) is required to be approved as part of the permitting process, if as is the case here, sensitive receptors (sensitive receptors in this instance excludes properties associated with the farm) are within 400m of the Installation boundary. It is appropriate to require an OMP when such sensitive receptors have been identified within 400m of the Installation to prevent, or where that is not practicable, to minimise the risk of pollution from odour emissions.

The risk assessment for the Installation provided with the Application lists key potential risks of odour pollution beyond the Installation boundary. These activities are as follows:

- Storage of feed on site;
- Drainage on yard areas;
- Housing of pigs;
- Cleaning of pig units;
- Temporary storage of manure;
- Spreading of manure; and
- Storage of animal carcasses.

Odour Management Plan Review

There is one residential receptor located within 100m of the Installation boundary; however, this is owned by the Operator and is not currently occupied.

The pigs are fed a multi-stage diet in accordance with our guidance. This should minimise odours from excreta. Daily checks on the pigs' welfare are made.

The two units on site which house the pigs have solid concrete floors and straw covering. Manure is scraped daily from the pig units and exported from the Installation for spreading on land.

Carcasses are stored in covered containers and are collected from site weekly. Site infrastructure is regularly inspected and maintained.

The units will be washed following removal of the pigs. Wash water from this activity will collect in a dirty water tank prior to spreading on land off-site.

Monitoring will be undertaken on a daily basis whilst the first batch of pigs are onsite. Following this, if excessive odours are not detected, monitoring will cease but will resume in the event that ongoing odour complaints are received.

The Operator has a complaints procedure to investigate reports of odour and to implement remedial measures in the event of its occurrence.

The measures in the OMP will be reviewed annually or following receipt of a substantiated odour complaint to ensure it is robust.

Conclusion

We have reviewed and approved the OMP 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 operator.

Noise

Intensive farming by its nature involves activities that have the potential to cause noise pollution. This is recognised in our 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 guidance. Under section 3.4 of this guidance a Noise Management Plan (NMP) must be approved as part of the permitting determination, if there are sensitive receptors within 400m of the Installation boundary.

Condition 3.4 of the Permit reads as follows:

Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the Operator has used

appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan, to prevent or where that is not practicable to minimise the noise and vibration.

There are sensitive receptors within 400 metres of the Installation boundary as stated above. The Operator has provided a noise management plan (NMP) as part of the application supporting documentation; further details are provided below.

The risk assessment for the Installation provided with the application lists key potential risks of noise pollution beyond the Installation boundary. These activities are as follows:

- Housing of pigs;
- Ventilating the pig housing;
- Feeding the pigs;
- Cleaning the pig housing;
- Deliveries of raw materials;
- Collections of live pigs, carcasses and manure;
- Maintenance of site infrastructure; and
- Noise from staff, contractors and visitors.

Noise Management Plan Review

There is one residential receptor located within 100m of the Installation boundary; however, this is owned by the Operator and is not currently occupied.

Site infrastructure and equipment, including roads, will be regularly inspected and maintained.

The timing of operations, such as deliveries and collections, will be restricted to daytime working hours where possible. Vehicles making feed deliveries will be fitted with low noise units. Engine revs will be minimised and turned off when not in use.

Noise from staff, contractors and visitors will be minimised.

The Operator has a complaints procedure to investigate reports of noise and to implement remedial measures in the event of its occurrence.

The Noise Management Plan will be reviewed annually or following investigations into any noise complaints in the event that they arise.

Conclusion

We have assessed the NMP and the H1 risk assessment for noise and conclude that the Applicant has followed the guidance set out in EPR 6.09 Appendix 5 ‘Noise management at intensive livestock installations’. We are satisfied that all sources and receptors have been identified and that the proposed mitigation measures will minimise the risk of noise pollution/ nuisance.

Dust and Bioaerosols

The use of Best Available Techniques and good practice will ensure minimisation of emissions. There are measures included within the Permit (the ‘Fugitive Emissions’ conditions) to provide a level of protection. Condition 3.2.1 ‘Emissions of substances not controlled by an emission limit’ is included in the Permit. This is used in conjunction with condition 3.2.2 which states that in the event of fugitive emissions causing pollution following commissioning of the Installation, the Operator is required to undertake a review of site activities, provide an emissions management plan and to undertake any mitigation recommended as part of that report, once agreed in writing with the Environment Agency.

There is one sensitive receptor located within 100m of the Installation boundary, though the property is not currently occupied. The sensitive receptor (the nearest point of their assumed property boundary) is approximately 45 metres east of the Installation boundary.

Guidance on our website concludes that applicants need to produce and submit a dust and bio aerosol risk assessment with their applications only if there are relevant receptors within 100 metres of their farm, e.g. the farmhouse or farm worker's houses. Details can be found via the link below:

www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit#air-emissions-dust-and-bioaerosols.

As there are receptors within 100 metres of the Installation, the Applicant was required to submit a dust and bio aerosol risk assessment in this format.

In the guidance mentioned above, it states that particulate concentrations fall off rapidly with distance from the emitting source. This fact, together with the proposed good management of the Installation, reduce the potential for emissions impacting the nearest receptors. The Applicant has confirmed the following measures in their operating techniques to reduce dust:

- Finely ground feed is avoided where possible;
- Feed systems are sealed and the storage bins have cyclones fitted to prevent atmospheric dust upon delivery;
- Feed infrastructure is regularly inspected and maintained.
- The feed bins are protected from physical damage; and
- Straw is used as a source of bedding in the pig units.

The Applicant has a procedure to investigate the causes of dust in the event that complaints are received.

Conclusion

We are satisfied that the measures outlined in the application will minimise the potential for dust and bioaerosol emissions from the Installation.

Ammonia

There are no Special Areas of Conservation, Special Protection Areas or Ramsar sites located within 10 kilometres of the Installation. There is one Site of Special Scientific Interest (SSSI) located within 5 km of the Installation. There are also six Local Wildlife Sites (LWS), and one Ancient Woodland (AW) within 2 km of the Installation.

Ammonia Assessment – SSSI

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 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 5 km of the SSSI.

Initial screening using the ammonia screening tool version 4.5 has indicated that emissions from Horwell Barton Farm will only have a potential impact on the SSSI site with a precautionary critical level of 1µg/m^3 if it is within 1,694 metres of the emission source.

Beyond 1,694 metres the PC is less than 0.2µg/m^3 (i.e. less than 20% of the precautionary 1µg/m^3 critical level) and therefore beyond this distance the PC is insignificant. In this case the SSSI is beyond this distance (see table below) and therefore it screens out of any further assessment.

Where the precautionary level of 1µg/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 1µg/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 1 – SSSI Assessment

Name of SSSI	Distance from site (m)
Nymet Barton Marsh	3,001

Ammonia Assessment – LWS and AW

The following trigger thresholds have been applied for the assessment of these sites:

- If the process contribution (PC) is below 100% of the relevant critical level (CLe) or critical load (CLo) then the farm can be permitted with no further assessment.

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Horwell Barton Farm will only have a potential impact on the LWSs and AW sites with a precautionary critical level of 1µg/m^3 if they are within 707 metres of the emission source.

Beyond 707 metres the PC is less than 1µg/m^3 and therefore beyond this distance the PC is insignificant. In this case all LWSs and the AW are beyond this distance (see table below) and therefore screen out of any further assessment.

Table 2 – LWS Assessment

Name of LWS	Distance from site (m)
Higher Penstone	1,425
Tapps Farm	1,775
Higherdown Bottom	1,706
Prestons Farm	1,384
Severn Acre Brake	1,060
Six Acre Copse	1,138

Table 3 – AW Assessment

Name of AW	Distance from site (m)
Bitterknowle Wood	1,063

Decision checklist

Aspect considered	Decision
Receipt of application	
Confidential information	A claim for commercial or industrial confidentiality has not been made.
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential.
Consultation	
Consultation	The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement. The application was publicised on the GOV.UK website. We consulted the following organisations: • The Director of Public Health; • Public Health England; • The Health and Safety Executive; and • Mid Devon District Council – Planning and Environmental Health. The comments from Public Health England and our responses are summarised in the consultation section. No comments were received from the other consultees.
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 our guidance on legal operator for environmental permits.
The facility	
The regulated facility	We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility', Appendix 2 of RGN 2 'Defining the scope of the installation' and Appendix 1 of RGN 2 'Interpretation of Schedule 1. The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.
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. The plan is included in the permit.
Site condition report	The Operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under the Industrial Emissions Directive.
Biodiversity, heritage,	The application is within the relevant distance criteria of a site of heritage,

Aspect considered	Decision
landscape and nature conservation	landscape or nature conservation, and/or protected species or habitat. We have assessed the application and its potential to affect all known sites of nature conservation, landscape and heritage and/or protected species or habitats identified in the nature conservation screening report as part of the permitting process. We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified. We have not consulted Natural England on the application. The decision was taken in accordance with our guidance.
Environmental risk assessment	
Environmental risk	We have reviewed the Operator's assessment of the environmental risk from the facility. The Operator's risk assessment is satisfactory.
Operating techniques	
General operating techniques	We have reviewed the techniques used by the Operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility. The operating techniques that the Applicant must use are specified in table S1.2 in the environmental permit. The operating techniques are as follows: • The pig units have solid concrete floors and a full litter system. Dunging areas are scraped daily. Manure is temporarily stored in the end part of the units prior to daily removal from the Installation. • Straw is stored in a covered building to minimise the moisture content of the bedding and resulting farm yard manure. • Wash water from the pig units is directed to an underground storage tank over impermeable surfacing. This will be used to spread on land outside of the permitted boundary. • Clean water from the roofs of buildings is separated and discharged to surface waters. The proposed techniques for priorities for control are in line with the benchmark levels contained in the Sector Guidance Note EPR 6.09 and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs.
Odour management	We have reviewed the odour management plan in accordance with our guidance on odour management. We consider that the odour management plan is satisfactory. See 'key issues' section.
Noise management	We have reviewed the noise management plan in accordance with our guidance on noise assessment and control. We consider that the noise management plan is satisfactory. See 'key issues' section.

Aspect considered	Decision
Permit conditions	
Use of conditions other than those from the template	Based on the information in the application, we consider that we do not need to impose conditions other than those in our permit template.
Emission limits	Emission Limit Values (ELVs) based on BAT have been set for the following substances: • 4.0kg N/animal place/year for weaners; • 2.2kg P_2O_5/animal place/year for weaners; • 0.7kg NH_3/animal place/year for weaners; • 13.0kg N/animal place/year for fattening pigs; • 5.4kg P_2O_5/animal place/year for fattening pigs; and • 5.65kg N/animal place/year for fattening pigs. See 'key issues' section.
Monitoring	We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified. These monitoring requirements have been imposed in order to implement the requirements of the IRRP BAT Conclusions as published on 21/02/17. See 'key issues' section.
Reporting	We have specified reporting in the permit to comply with the IRRP BAT Conclusions as published on 21/02/17. See 'key issues' section.
Operator competence	
Management system	There is no known reason to consider that the Operator will not have the management system to enable it to comply with the permit conditions. The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.
Relevant convictions	The Case Management System has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The Operator satisfies the criteria in our guidance on operator competence.
Financial competence	There is no known reason to consider that the Operator will not be financially able to comply with the permit conditions.
Growth duty	
Section 108 Deregulation Act 2015 – Growth duty	We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to vary this permit.

Aspect considered	Decision
	Paragraph 1.3 of the guidance says: "The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation." We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections. We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the Operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

Consultation

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public and the way in which we have considered these in the determination process.

Responses from organisations listed in the consultation section

Response received on 06/02/18 from
Public Health England
Brief summary of issues raised
Public Health England identified potential risks from emissions to air of bioaerosols, dust including particulate matter and ammonia from the site due to its proposals to operate as an intensive farming installation. However, due to the distance of the site from nearby receptors, Public Health England does not consider that it will pose a significant risk.
Summary of actions taken or show how this has been covered
Although the risks from airborne emissions from Horwell Barton Farm are low, these will be further minimised through the use by the Operator of a Dust and Bioaerosols Management Plan. The Operator will also be required by condition 4.2 of the permit to report to the Environment Agency annually on emissions of dust from the site. Standard conditions, 3.1.1 and 3.2.1, concerning fugitive emissions are contained within the permit.