

# **Permitting decisions**

**Bespoke permit** 

We have decided to grant the permit for Swaythorpe Farm operated by JSR Farms Limited.

The permit number is EPR/NP3231QR.

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 <u>decision checklist</u> to show how all relevant factors have been taken into account
- shows how we have considered the <u>consultation responses</u>.

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

### Introduction

This is an existing farm which is proposing to operate above EPR regulations threshold for production pigs of 30kg of 2000 and hence is a new installation. The site has operated as a pig farm since 2018 and the current production pig numbers are approximately 1400 prior to permit issue and rising to a maximum of 5,000 after permit issue.

This is a batch all in all out farm starting with pigs arriving at 20 to 30 kg weight; as all will eventually be production pigs greater than 30 kg weight the S1.1 activity table has defined installation as 5,000 production pigs.

# New Intensive Rearing of Poultry or Pigs BAT Conclusions document

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 will set 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 the BAT Conclusions are published all new installation farming permits issued after the 21<sup>st</sup> 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 for ammonia emissions which will apply to the majority of permits, as well as BAT associated levels for nitrogen and phosphorus excretion.

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

#### New BAT conclusions review

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

The Applicant has confirmed their compliance with all BAT conditions for the new installation in their Non-Technical Summary document dated 30/01/19 and their duly making response dated 24/05/19.

The following is a more specific review of the measures 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:
	13 kg N/animal place/year for fattening pigs (production pigs > 30kg)
	By using manure analysis for total nitrogen content.
	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 Phosphorus excretion	The Applicant has confirmed it will demonstrate it achieves levels of Phosphorus excretion below the required BAT-AEL of :
	5.4 kg $P_2O_5$ animal place/year for fattening pigs (production pigs > 30kg)
	By using manure analysis for total phosphorus content.

BAT measure	Applicant compliance measure
	Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 24 Monitoring of emissions and process parameters - Total nitrogen and phosphorus excretion	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions. The operator has confirmed usage of mass balance as per detail within the BAT 3 and 4 measures sections above.
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. The Applicant has confirmed they will report the ammonia emissions to the Environment Agency annually by multiplying the emissions factor for broilers by the number of pigs on site.
BAT 26 Monitoring of emissions and process parameters - Odour emissions	The approved OMP includes operator confirmation of their usage of site tours to meet compliance with this specific odour monitoring criteria.
BAT 27 Monitoring of emissions and process parameters -Dust emissions	Table S3.3 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 emissions factor for broilers by the number of pigs on site.
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 type: 5.65 kg NH <sub>3</sub> /animal place/year for fattening pigs on straw (production pigs > 30kg)

#### More detailed assessment of specific BAT measures

#### Ammonia emission controls

A BAT Associated Emission Level (AEL) provides us with a performance benchmark to determine whether an activity is BAT.

#### 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.

'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 21<sup>st</sup> February, including those where there is a mixture of old and new housing, will now need to meet the BAT-AEL.

We have evidence from AHDB monitoring report date entitled "Establishing Ammonia Emission Factors for Straw Based Buildings AHDB PORK" dated September 2017 that production pigs on straw can comply with emission factors of 2 kg NH<sub>3</sub>/animal place/year for fattening pigs and hence are in compliance with ammonia BAT AEL of 5.65 kg NH<sub>3</sub>/animal place/year.

# 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 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 Swaythorpe Farm (dated 30/01/19) 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 (<u>http://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/297084/geho0110brsb-e-e.pdf</u>).

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.

We have included our standard odour condition 3.3.1 in the permit, which required that the 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 appropriate measures, including, but not limited to, those specified in any approved OMP (which is captured through condition 2.3 and Table S1.2 of the permit), to prevent or where that is not practicable, to minimise odour.

The operator must operate the installation in line with the operating techniques set out in the application supporting documents and the OMP. Once the operation of the installation commences, there is a requirement to review and record (as soon as practicable after a complaint) whether changes to the OMP should be made and make any appropriate changes to the OMP identified in the review.

#### Odour Management Plan Review

The sensitive receptors that have been considered under odour and noise do not include the operator's property and other people associated with the farm operations as odour and noise are amenity issues.

There are two sensitive receptors within 400m of the site boundary. The operator has identified these receptors as one within 105 metres of installation boundary to the north west of farm, (if the garden of this property is included the edge of the property is approximately 80m from the installation boundary) and one approximately 205m from farm boundary (north east of the farm)

The operator is required to manage activities at the installation in accordance with condition 3.3.1 of the permit and it's OMP (version received 08/07/19) reference 'Odour Management Plan').

The OMP includes odour control measures, in particular, procedural controls such as feed delivery, storage and distribution, carcass storage, cleaning out of livestock, and the storing and spreading of manure and slurry. The operator has identified the potential sources of odour (see risks bullet pointed above), as well as the potential risks and problems, and detailed actions taken to minimise odour.

The operator has added a specific emergency plan criteria. This is to ensure if there is more than two odour complaints substantiated from the installation which are not resolved by the end of a pig cycle, they will be required to submit an action plan to the Environment Agency for our approval for further odour measures to minimise the risk of odour pollution before the next cycle commences.

The general wind direction is predominantly from the south west. This means that the second receptor to the north east could potentially be impacted the most by the installation.

The Environment Agency has reviewed 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.

Whilst there is potential for odour pollution from the installation, the overall risk can be minimised by complying with the permit conditions, careful management and compliance with the OMP and reviewing the OMP when required. We are satisfied that operations carried out on the Installation will minimise the risk of odour pollution

#### 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 in the 'Odour' section above. The Operator has provided a noise management plan (NMP) as part of the Application supporting documentation, and further details are provided in 'Noise Management Plan Review' below.

#### Noise Management Plan Review

A noise management plan (NMP) has been provided by the operator) as part of the application supporting documentation (reference 'Noise Management Plan' (revised and received 31/05/19).

The NMP also provides a suitable procedure in the event of complaints in relation to noise. The NMP is required to be reviewed at least every 4 years, however the operator has confirmed that it will be reviewed if a complaint is received, whichever is sooner.

Operations with the most potential to cause noise nuisance have been assessed and control measures put in place for all vehicles accessing the site and manoeuvring around, vehicles and machinery carrying out operations on site, feed delivery and transfer from lorry to storage, pigs movements on site, waste collections, general delivers and staff vehicles, stocking and destocking of pig houses, operation of ventilation systems, personnel, pig noise, clean out and manual washing and cleaning of equipment.

We have included our standard noise and vibration condition 3.4.1 in the Permit, which requires that emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the Installation, 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 (which is captured through condition 2.3 and Table S1.2 of the Permit), to prevent or where that is not practicable to minimise the noise and vibration.

We are satisfied that the manner in which operations are carried out on the Installation will minimise the risk of noise pollution.

#### **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.

Guidance on our website concludes that applicants need to produce and submit a dust and bioaerosol management plan 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-dustand-bioaerosols.

As there is one receptor within 100m of the Installation, the Applicant was required to submit a dust and bioaerosol management plan in this format. The dust management plan is dated 31/05/19.

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 such as keeping areas clean from build-up of dust, and other measures in place to reduce dust and risk of spillages (e.g. litter and feed management/delivery procedures) all reduce the potential for emissions impacting the nearest receptors.

The operator has confirmed the measures in their operating techniques to reduce dust, which will inherently reduce bioaerosols, for the following: General – day-to-day activity; Pig feed – Dust from filling and emptying feed bins, dust from feed storage, feed spill control, the use of wet and dry feed and feeding method; Type of slurry system; Ventilation systems; House cleaning – general management; Building layout and design

#### **Conclusion**

We are satisfied that the measures outlined in the Application will minimise the potential for dust and bio aerosol emissions from the Installation.

#### Ammonia

There are no Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites or Sites of Special Scientific Interest (SSSI) located within 5 kilometres of the installation. There are two Local Wildlife Sites (LWS), within 2 km of the installation. The ammonia assessment has been completed on the worst case basis of 5,000 production pigs present within the installation at all times.

#### Ammonia assessment - LWS

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 Oakwood Farm will only have a potential impact on the LWS site with a precautionary critical level of  $1\mu g/m^3$  if they are within **1,223 metres** of the emission source.

Beyond **1,223 m** the PC is less than  $1\mu g/m^3$  and therefore beyond this distance the PC is insignificant. In this case the LWS is beyond this distance (see table below) and therefore screen out of any further assessment.

#### Table 4 – LWS Assessment

Name of SAC/SPA/Ramsar	Distance from site (m)
Dotterill Park, Kilham LWS	2,065
The Stone Pit, Thwing LWS	1,791

# **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.	
	The decision was taken in accordance with our guidance on confidentiality.	
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:	
	Local Council Environmental Health Department	
	Health and Safety Executive	
	Department of Public Health	
	Public Health England	
	The comments and our responses are summarised in the consultation section.	
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'.	
	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.	
Biodiversity, heritage, landscape and nature	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.	
conservation	We have assessed the application and its potential to affect all known sites of nature	

Aspect considered	Decision	
	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. See 'Ammonia' section earlier in this document for further details.	
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 key operating techniques are as follows:	
	<ul> <li>Non-technical summary giving key operating techniques summary including operation of an all in all out pig farm with 5,000 production pigs and three animal houses. The pigs arrive 20 to 30 kg and leave at 110kg.</li> </ul>	
	Technical Standards document with emissions to air and water	
	Odour, Noise and Dust and Bio aerosol Management Plans	
	<ul> <li>BAT conclusions ammonia, dust and nitrogen/phosphorus monitoring techniques within duly making response dated 24/05/19.</li> </ul>	
	Revised site drainage and site plans dated 08/07/19.	
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.	
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.	
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	We have decided that emission limits are required in the permit. BAT AELs have been added in line with the Intensive Farming sector BAT conclusions document dated 21/02/17. These limits are included in permit table S3.3.	

Aspect considered	Decision
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 ensure compliance with Intensive Farming BAT conclusions document dated 21/02/17.
Reporting	We have specified reporting in the permit.
	We made these decisions in order to ensure compliance with Intensive Farming BAT conclusions document dated 21/02/17.
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 and National Enforcement Database have 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.
	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 from		
Public Health Engla	and (received 22/07/2018)	
Brief summary of	issues raised	
Bio aerosol impact f	rom new installation	
Brief summary of	our response	
	plan provided and reviewed by Environment Agency as acceptable following our usion we consider measures are in place to satisfactorily minimize impacts from this	

In addition, the application was publicised on the www.gov.uk website, but no comments were received by the deadline of **26/07/2019.**