

Permitting decisions

Bespoke permit

We have decided to grant the permit for Southlands Pig Unit operated by JSR Farms Ltd.

The permit number is EPR/CP3404SW.

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. The decision checklist summarises the decision making process to show how all relevant factors have been taken in to account.

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](#).

Key issues of the decision

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 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 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 after the new BAT Conclusions were published.

New BAT Conclusions review

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

The Applicant confirmed in the application documents that the new installation complies in full with all the BAT Conclusion measures.

The Applicant has confirmed their compliance with all BAT conditions for the new installations or new housing in their document reference Technical Standards and dated 08/12/2020 which has been referenced in Table S1.2 Operating Techniques of the permit.

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 that the installation achieves levels of Nitrogen excretion below the required BAT-AEL of 30 kg N/animal place/year by an estimation 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 - Phosphorous excretion	The Applicant has confirmed it will demonstrate that the installation achieves levels of Phosphorous excretion below the required BAT-AEL of 15 kg P ₂ O ₅ animal place/year by an estimation using manure analysis for total Phosphorous content. 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	Table S3.3 concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.

BAT measure	Applicant compliance measure
<ul style="list-style-type: none"> - Total nitrogen and phosphorous excretion 	
BAT 25 Monitoring of emissions and process parameters <ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> - Odour emissions 	The approved odour management plan (OMP) includes the following details for on Farm Monitoring and Continual Improvement: <ul style="list-style-type: none"> • The staff will perform a daily boundary walk to check the surrounding area for high levels of odour. Checks will also be performed on the surrounding area by persons who do not regularly work on the farm. • Visual (and nasal) inspections of potentially odorous activities will be carried out.
BAT 27 Monitoring of emissions and process parameters <ul style="list-style-type: none"> - Dust emissions 	Table S3.3 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 estimation using the emissions factors calculated for the annual number of pigs at each stage within the unit.
BAT 30 Ammonia emissions from pig houses	The Applicant has confirmed it will demonstrate that the installation achieves levels of ammonia below the required BAT-AEL for the following pig types: <p>Sows: 2.7 kg NH₃/animal place/year.</p> <p>Farrowers: 5.6 kg NH₃/animal place/year.</p> <p>The installation does not include an air abatement treatment facility, hence the standard emission factor complies with the BAT-AEL.</p>

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 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 Southlands Pig Unit (dated 08/12/2020) 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:

- Feed selection and storage
- Slurry storage and removal
- Yard areas

- Housing
- Drinking water systems
- Ventilation
- Cleanout
- Carcase storage storage and disposal

Odour Management Plan Review

An odour management plan was submitted as part of the permit application because there are sensitive receptors within 400m of the installation boundary.

The installation is located within 400m of one receptor, as detailed in the OMP. This receptor is approximately 250m to the north of the installation boundary.

The odour management plan details how activities on site will be managed to control odour, in particular to the delivery of feed and stock, litter (including carcasses) management, dirty water control, and heating and ventilation. The OMP outlines a complaints procedure, should there be any, contingency plans for abnormal operations and the OMP will be reviewed every year, or earlier if there are substantial complaints.

We are therefore satisfied that operations on site will reduce the risk of odour pollution and consider the site to be low risk.

The Environment Agency has reviewed the OMP and considers it compliant with the requirements of our H4 Odour Management guidance note. We agree with the scope and suitability of the 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.

Conclusion

Although there is potential for odour pollution from the Installation, the operator's compliance with the Permit and its OMP will minimise the risk of odour pollution beyond the Installation boundary. The risk of odour pollution at sensitive receptors beyond the Installation boundary is therefore not considered significant.

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 an NMP as part of the application supporting documentation, and 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:

- Feeding of animals
- Delivery and preparation of feed
- Pig moving, loading in and out
- Slurry transfer pumps, filling and emptying
- Delivery of supplies and materials
- Ventilation fans

- Vehicles operating within installation boundary
- Alarms

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.

Noise Management Plan Review

The plan was received as part of the permit application. Operations likely to cause noise pollution are assessed and include: use of machinery and vehicles, feed transfer, ventilation, pig removal and restocking, personnel and alarm systems. The noise management plan outlines control measures that will be taken to reduce any noise impact.

The installation is located within 400m of one receptor, as detailed in the OMP. This receptor is approximately 250m to the north of the installation boundary.

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.

Ammonia

The Applicant has demonstrated that the housing will meet the relevant NH3 BAT-AEL.

There is one Sites of Special Scientific Interest (SSSI) within 5km of the installation, and two Local Wildlife Sites (LWS) within 2km. An assessment of the impact of emissions has been carried out and the installation is considered to have no adverse effect on the nature conservation sites. There are no Special Areas of Conservation (SAC), Special Protection Areas (SPA) or Ramsars within 10km 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 Southland Pig Unit will only have a potential impact on SSSIs with a precautionary CLe of 1µg/m³ if they are within 1,302 metres of the emission source.

Beyond 1,302m the PC is less than 0.2µg/m³ (i.e. less than 20% of the precautionary 1µg/m³ CLe) and therefore beyond this distance the PC is insignificant. In this case the SSSI is beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of 1µg/m³ is used and the PC is assessed to be less than 20%, the site automatically screens out as insignificant and no further assessment of CLo 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 damage to these sites.

Table 1 – SSSI Assessment

Name of SSSI	Distance from site (m)
River Hull Headwaters	1,624

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 Southlands Pig Unit will only have a potential impact on the LWS sites with a precautionary CLe of $1\mu\text{g}/\text{m}^3$ if they are within 468 metres of the emission source.

Beyond 468m the PC is less than $1\mu\text{g}/\text{m}^3$ and therefore beyond this distance the PC is insignificant. In this case the LWSs are beyond this distance (see table below) and therefore screen out of any further assessment.

Table – LWS Assessment

Name of SAC/SPA/Ramsar	Distance from site (m)
Garden Covert, Neswick	1,898
Eastburn Beck Grassland	1,877

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	<p>The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our public participation statement.</p> <p>The application was publicised on the GOV.UK website.</p> <p>We consulted the following organisations:</p> <ul style="list-style-type: none"> - Local Authority – East Riding - Health & Safety Executive - Director of Public Health – East Riding - Public Health England <p>The comments and our responses are summarised in the consultation section.</p>
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	<p>We considered the extent and nature of the facility at the site in accordance with RGN2 ‘Understanding the meaning of regulated facility’.</p> <p>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.</p>
The site	
Extent of the site of the facility	The Operator has provided plans which we consider are 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 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>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.</p>

Aspect considered	Decision
	We consider that the application will not affect any sites of nature conservation, landscape and heritage, and/or protected species or habitats identified.
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: <ul style="list-style-type: none"> - Operating a pig unit consisting of three pig houses - Houses will be fully slatted, with slurry pits underneath each building, using a vacuum system to remove the slurry on a rotational basis - Buildings will be controlled by SKOV fan ventilation, with roof ventilation only, vents greater than 5.5 metres high, fan efflux velocity greater than 7 m/s. All of the farrowing accommodation will be on heat mats. - Dirty water from the yards is directed and added to the slurry store, to then be spread with slurry on JSR land in accordance with the Manure Management Plan. - Uncontaminated roof water is collected via gutters and down pipes and is discharged to the attenuation pond to lead to soakaways around the site boundaries, to end up in the Southburn / Eastburn becks. - There is a rigid covered slurry store with a total surface area of 1,057m² within the installation boundary prior to export off site.
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	
Emission limits	ELVs based on BAT have been set for the following substances: <ul style="list-style-type: none"> • ammonia • nitrogen • phosphorous We have decided that emission limits set out in Table 3.3 of the permit are required in accordance with the 2017 Intensive Farming BAT conclusion document requirements

Aspect considered	Decision
Monitoring	<p>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.</p> <p>These monitoring requirements have been imposed in order to ensure compliance with the 2017 Intensive Farming BAT conclusion document.</p>
Reporting	<p>We have specified reporting in the permit.</p> <p>We have made these decisions in accordance with the 2017 Intensive Farming BAT conclusion document dated 21/02/17.</p>
Operator competence	
Management system	<p>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.</p> <p>The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.</p>
Growth Duty	
Section 108 Deregulation Act 2015 – Growth duty	<p>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.</p> <p>Paragraph 1.3 of the guidance says:</p> <p>“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.”</p> <p>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.</p> <p>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.</p>

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 England
Brief summary of issues raised
<p>The main emissions of potential public health significance are emissions to air of bioaerosols, dust including particulate matter and ammonia. Based upon the submitted application, and providing it is well managed and maintained, the proposed installation is not considered to present any obvious cause for concern.</p> <p>It is assumed by PHE that the installation will comply in all respects with the requirements of the permit, including the application of Best Available Techniques (BAT). This should ensure that emissions present a low risk to human health.</p>
Summary of actions taken or show how this has been covered
No action required.