Permitting decisions

Bespoke permit

We have decided to grant the permit for Spen Farm operated by the University of Leeds.

The permit number is EPR/NP3132RD.

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

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 21/02/17. 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 available through here:
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 21/02/17 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 conclusions in total within the BAT Conclusion document dated 21/02/17.

We sent a request for information requiring the Applicant to confirm that the new installation complies in full with all BAT Conclusion measures. The Applicant confirmed their compliance with all applicable BAT conditions for the new installation in their email dated 24/01/20, 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-AELs of: • 4.0 kg N/animal place/year for weaners; • 13.0 kg N/animal place/year for fattening pigs; and • 30.0 kg N/animal place/year for sows (mating, gestating and farrowing). The Applicant can use a mass balance of Nitrogen based on the feed intake, dietary content of crude protein and animal performance or an estimation by using manure analysis for total Nitrogen content.
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-AELs: • 2.2 kg $P_2 0_5$/animal place/year for weaners; • 5.4 kg $P_2 0_5$/animal place/year for fattening pigs; and • 15.0 kg $P_2 0_5$/animal place/year for sows (mating, gestating and farrowing). The Applicant can use a mass balance of Phosphorus based on the feed intake, dietary content of crude protein, total Phosphorus and animal performance or an estimation by using manure analysis for total Phosphorus content.
BAT 24 - Monitoring of emissions and process parameters -	Table S3.3 of the permit (process monitoring) requires the Applicant to undertake relevant monitoring that complies with these BAT Conclusions.

BAT measure	Applicant compliance measure
total Nitrogen and Phosphorous excretion	
BAT 25 - Monitoring of emissions and process parameters - Ammonia emissions	Table S3.3 of the permit ('Process monitoring') requires the Applicant to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 26 - Monitoring of emissions and process parameters - odour emissions	We have approved the Applicant's odour management plan (OMP) during our determination of this permit application. Routine odour monitoring will be undertaken around the boundary of the unit each month. Where possible monitoring will be undertaken by staff or students who do not routinely work on the unit. Action will be taken if distinctive odour is detected. The OMP will be reviewed annually or following significant changes to the building/ management or a substantiated odour complaint.
BAT 27 - Monitoring of emissions and process parameters - dust emissions	Table S3.3 of the permit (process monitoring) requires the Applicant to undertake relevant monitoring that complies with these BAT Conclusions.
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-AELs for the following categories of pigs: • 0.53 kg NH_3/animal place/year for weaners; • 2.6 kg NH_3/animal place/year for production pigs >30 kg on fully slatted floors; • 5.65 kg NH_3/animal place/year for production pigs >30 kg on solid floors; • 5.2 kg NH_3/animal place/year for mating and gestating sows; and • 5.6 kg NH_3/animal place/year for farrowing sows. The installation does not include an air abatement treatment facility. See below for further details on how the Applicant will meet these BAT-AELs.

Ammonia emission controls – BAT conclusion 30

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

'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 21/02/17, including those where there is a mixture of old and new housing, will now need to meet the BAT-AEL.

Mating and gestating sows

Mating and gestating sows will be housed on solid floors with a full litter system (house 1). The standard emission factor for mating and gestating sows on this housing system is 4.57 kg NH_3/animal place/year and the emission factor is 5.2 kg NH_3/animal place/year. This therefore complies with the BAT-AEL without consideration of further measures to reduce ammonia emissions, such as reduced levels of crude protein in the feed and reduced occupancy per annum (between 8 - 10% annual downtime across the unit).

Farrowers

All farrowers at Spen Farm will be housed on fully slatted floors with frequent slurry removal ('FSF', maximum depth 800mm and removal at least every 6 weeks). Farrowers will be within houses 2 and 10. The standard emission factor for farrowers on FSF is 5.84 kg NH_3/animal place/year and the BAT-AEL is 5.6 kg NH_3/animal place/year for new plant. However, frequent emptying of the slurry reduces the emission factor for this housing type by around 25% (equaling 4.38 kg NH_3/animal place/year). The farrowing houses will also be unoccupied for 8% of the year, so a further reduction can be applied to the emission factor to ensure compliance with the BAT-AEL.

Production pigs

Production pigs (greater than 30 kg) will be housed primarily on FSF operating a maximum slurry depth of 800mm with frequent slurry removal (at least every 12 weeks). Production pigs will be within houses 4, 5, 6 and 7. The standard emission factor for this housing is 2 kg NH_3/animal place/year, which complies with the BAT-AEL of 2.6 kg NH_3/animal place/year.

The Applicant will also use manure collection in water to further reduce ammonia from production pig housing. This technique is referenced in IRPP BAT Conclusion 30a13. Although there is not currently an established ammonia reduction factor for this housing system, we agree that this technique demonstrates narrative BAT for the site.

Maiden gilts will be housed on a solid floor with a full litter system (house 1). Maiden gilts are considered as production pigs for the purposes of assigning BAT-AELs. The standard emission factor for this housing type is 2 kg NH_3/animal place/year, which complies with the BAT-AEL of 5.65 kg NH_3/animal place/year for production pigs on solid floor systems.

Weaners

Weaning pigs (between the weights of 7 and 30 kg) will be housed at the site on FSF with frequent slurry removal (maximum depth 800mm and removal at least every 12 weeks). Weaners will be within houses 3 and 8. The standard emission factor for this housing system is 0.7 kg NH_3/animal place/year and the BAT-AEL is 0.53 kg NH_3/animal place/year.

The ammonia reduction technique referenced in IRPP BAT Conclusion 30a13 will be used in weaners' housing. Although there is not currently an established ammonia reduction factor for this housing system, we agree that this technique demonstrates narrative BAT.

The Applicant has also provided a comparison with the Wallonia trial referenced in the IRPP Bref: Cabaraux et al., 'Gaseous emissions from weaned pigs raised on different floor systems. Agric. Ecosyst. Environ., 2009, 130, 86-92', 2009. The Wallonia trial gives an emission factor of 0.13 to 0.15 kg NH_3/animal place/year for weaners' in housing which uses the manure collection in water technique. The growing period at Spen Farm will be 18% greater than the time used in the Wallonia trial, so the Applicant has made an assumption that emissions will be 30% higher. This gives an estimated emission factor of 0.2 kg NH_3/animal place/year. We are satisfied that the Applicant will achieve the BAT-AEL for this housing of 0.53 kg NH_3/animal place/year.

Trial house

The installation includes a trial building (house 11) which can temporarily house a small number of pigs taken from other houses on the site (excluding farrowers). This building will have a solid floor with straw bedding and high velocity roof ventilation. It can achieve the BAT-AEL for all types of pigs which it may house:

- the standard emission factor for weaners on solid floors is 0.675 kg NH_3/animal place/year - the BAT-AEL is 0.7 kg NH_3/animal place/year;
- the standard emission factor for sows on solid floors is 4.57 kg NH_3/animal place/year - the BAT-AEL is 5.2 kg NH_3/animal place/year; and
- the standard emission factor for production pigs on solid floors is 2 kg NH_3/animal place/year - the BAT-AEL is 5.65 kg NH_3/animal place/year.

However, because these pigs are accounted for in other housing on the site, and they are relatively small in number, we have not included house 11 in table S3.3 of the permit (concerning process monitoring).

Protein

The Applicant states in their application that pigs at Spen Farm will receive a diet which contains at least 2% less crude protein compared to existing standards. It is typically accepted that a 2% reduction in protein equates to a 20% reduction in ammonia emissions. However, diets at Spen Farm are likely to vary due to the nature of the trial work undertaken. We have not required further information to demonstrate a 2% reduction as we are satisfied that the Applicant will comply with the BAT-AELs and not have an impact on nature conservation sites without accounting for reduction in the ammonia emissions from crude protein.

Industrial Emissions Directive (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 Spen Farm (received 28/08/19) 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: 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 are within 400 metres of the installation boundary. Sensitive receptors in this instance excludes properties associated with the farm. It is appropriate to require an

OMP when such sensitive receptors have been identified 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:

- processes associated with feeding;
- collection of carcasses;
- movement of slurry and manure;
- ventilation of the livestock houses;
- spillages in houses with full litter systems;
- cleaning of the livestock houses; and
- transfer of livestock.

Review of Odour Management Plan

The nearest sensitive receptors are located approximately 100 metres from the closest point of the installation boundary. A low risk OMP has been required with this permit application. The OMP includes the following measures (amongst others) to manage the risk of odour:

- pelletised feed systems will be enclosed;
- carcasses will be stored within sealed containers and collected within 24 hours (where possible);
- manure will be kept in an undercover store with drainage directed to the slurry tanks;
- slurry will be added through a sealed system beneath the surface in tanks (which are covered);
- livestock houses, including ventilation fans, will be cleaned between the batches of livestock;
- drinkers will be maintained and straw will be frequently topped up to keep the sow bedding dry; and
- loading pens will be cleaned immediately after use, with drainage systems maintained to ensure no ponding of effluents.

Odour monitoring around the perimeter of the unit will also be undertaken on a monthly basis. The OMP contains provisions for responding to odour complaints and for reviewing the OMP to ensure that the measures are effective.

Conclusion

We have assessed the OMP and the H1 risk assessment for odour and conclude that the Applicant has followed the guidance set out in EPR 6.09 Appendix 4 ‘Odour 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 odour pollution / nuisance.

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 Applicant has provided an NMP with the application, 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:

- movement of vehicles to, around and from the unit;
- transfer of feed onto the unit and into the livestock housing;
- operation of ventilation fans on the livestock housing;
- livestock;
- personnel; and
- spreading slurries off-site.

Noise Management Plan Review

The NMP includes the following measures to minimise the risk of noise:

- vehicles on site are well maintained and driven at low speeds;
- feed silos are filled during ordinary working hours and given to the pigs on an ad-lib basis;
- ventilation fans are regularly cleaned and maintained;
- staff are trained to handle the pigs calmly and quietly; and
- operations will be during ordinary working hours (apart from in exceptional circumstances).

The NMP also includes provisions for managing complaints and reviewing the NMP.

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

Applicants are required to submit a dust and bioaerosol risk assessment and management plan with their application where there are sensitive receptors within 100 metres of the installation. This includes farmhouses and the houses of farm workers. Guidance is available here: www.gov.uk/guidance/intensive-farming-risk-assessment-for-your-environmental-permit#air-emissions-dust-and-bioaerosols

In this instance, there is one sensitive receptor within approximately 10 metres of the closest source of air emissions (the Farm House to the south-east of the installation) and there are a further four sensitive receptors approximately 100 metres from the nearest point of the installation boundary; these are residential properties located to the east of the installation.

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, will reduce the potential for emissions from Spen Farm impacting the nearest sensitive receptors. The Applicant has submitted a dust and bioaerosol risk assessment and management plan which includes the following operating techniques:

- pelletised feed will be delivered in enclosed systems;
- ventilation fans will be inspected weekly and cleaned as necessary;
- straw will be added to the solid floor housing systems on a regular basis; and
- the buildings will cleaned through at the end of each batch, with wash water contained in the covered slurry tanks.

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

The use of Best Available Techniques and good practice will ensure minimisation of emissions from the installation. There are also 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 Applicant 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.

Ammonia

There are three Sites of Special Scientific Interest (SSSIs) located within 5 km of the installation. There are also two Local Wildlife Sites (LWS) and two Ancient Woodlands (AW) within 2 km of the installation.

The Applicant submitted detailed ammonia modelling to assess emissions from Spen Farm on habitat sites; this is titled 'A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Existing and Proposed Pig Rearing Houses at Spen Farm, Spen Common Lane, near Bramham in West Yorkshire', produced by AS Modelling & Data Ltd and dated 11/05/19 ("the Modelling").

We have identified some inconsistencies in the Modelling compared with the remainder of the application. In particular:

- The Modelling does not consider emissions from the trial house (number 11). However, the livestock which may be kept in this house are accounted for elsewhere in the Modelling. The trial house is located close to the other livestock houses and it is similarly ventilated (high speed roof ventilation).
- The Modelling assesses 120 farrowers, whereas the Applicant has applied to have up to 140 farrowers. The standard emission factor for farrowers on fully slatted floors is 5.84 kg NH_3/animal place/year. Frequent slurry removal reduces this emission factor by approximately 25%.
- The Modelling assesses 960 of the production pigs (on solid floors with full litter systems) using an emission factor of 4.14 kg NH_3/animal place/year, whereas the emission factor which currently applies to this housing system is 2 kg NH_3/animal place/year.
- The Modelling assesses 2,340 weaners (from the indoor breeding stock) using an emission factor of 1.19 kg NH_3/animal place/year, which is the standard emission factor for pigs between the weights of 15 - 30 kg on fully slatted floors with a vacuum system for frequent slurry removal. However, a lower emission factor of 0.7 kg NH_3/animal place/year could have applied as the 2,340 weaners will be between the weights of 7 - 30 kg.
- The Modelling assesses one of the three slurry tanks using an emission factor of 1.4 kg NH_3/m^2, whereas this tank will have a rigid cover so the standard emission factor is 0.28 kg NH_3/m^2.
- The Modelling does not take into account ammonia reduction techniques such as manure collection in water, reduced crude protein or annual occupancy rates.

Overall the Modelling is considered to be a more precautionary assessment as it overestimates emissions from the site.

We have audited the Modelling and undertaken sensitivity checks. We agree with the conclusions in the Modelling that there will not likely be any exceedances of the thresholds for critical levels and loads at any relevant habitat sites.

The figures which follow in tables 1 and 2 are taken directly from the Applicants' Modelling. For the reasons stated above, the figures are not considered to be entirely representative of the emissions from Spen Farm - but they are more conservative.

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.

Screening using the detailed Modelling has indicated that the PC for Norwood Bottoms SSSI, Stutton Ings SSSI and Hook Moor SSSI is predicted to be less than 20% of the CLe for ammonia emissions, therefore it is possible to conclude no damage. See results in table 1 below.

The Modelling has been audited in detail by our Air Quality Modelling and Assessment Unit and we have confidence that we can agree with the report's conclusions.

Table 1 – Ammonia emissions

Site	Ammonia Cle (µg/m^3)	PC (µg/m^3)	PC % critical level
Norwood Bottoms SSSI	1*	0.038	3.8
Stutton Ings SSSI	1*	0.07	7
Hook Moor SSSI	1*	0.039	3.9

A precautionary level of 1 µg/m^3 has been used. Where the precautionary level of 1 µg/m^3 is used and the PC is assessed to be less than the 20% insignificance threshold, it is not necessary to further consider nitrogen deposition or acid deposition CLo values. In these cases the 1 µg/m^3 level used has not been confirmed, but it is precautionary.

No further assessment required.

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.

Screening using the Modelling has determined that the PC at all LWS and AW for ammonia emissions from the application site are under the 100% significance threshold and can be screened out as having no likely significant effect. See results in table 2 below.

Detailed modelling provided by the Applicant has been audited in detail by our Air Quality Modelling and Assessment Unit (AQMAU) and we have confidence that we can agree with the report's conclusions.

Table 2 - Ammonia emissions

Site	Critical level ammonia µg/m^3	Predicted PC µg/m^3	PC % of critical level
Bramham Park LWS	1*	0.819	81.9
Hazel Wood AW	1*	0.652	65.2
Hazel Wood LWS	1*	0.638	63.8
Biggin Wood AW	1*	0.317	31.7

* Precautionary CLe of 1 µg/m^3 has been used. Where the precautionary level of 1 µg/m^3 is used and the PC is assessed to be less than 100%, the site automatically screens out as insignificant and no further assessment of critical load is necessary. In these cases the 1 µg/m^3 level used has not been confirmed, but it is precautionary.

No further assessment required.

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: • Director of Public Health • Public Health England • Health and Safety Executive • Local Planning Authority - Leeds City Council • Local Authority - Environmental Health - Leeds City Council. 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 Applicant 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 Applicant 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, landscape and nature conservation	The application is within the relevant distance criteria of a site of heritage, 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.

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. 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 Applicant's assessment of the environmental risk from the facility. The Applicant's risk assessment is satisfactory.
Operating techniques	
General operating techniques	We have reviewed the techniques used by the Applicant 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. Operating techniques include: • high speed roof ventilation on the majority of livestock houses; • manure collection in water; • frequent slurry removal; and • use of covered circular slurry tanks. 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.
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	BAT-Associated Emission Levels for nitrogen, phosphorus and ammonia have been set in accordance with the IRPP BAT Conclusions published on 21/02/17. See the 'Key issues' section for further details.
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 IRPP BAT Conclusions published on 21/02/17.

Aspect considered	Decision
Reporting	We have specified reporting in the permit. We made these decisions in accordance with the IRPP BAT Conclusions published on 21/02/17.
Operator competence	
Management system	There is no known reason to consider that the Applicant 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 Applicant satisfies the criteria in our guidance on operator competence.
Financial competence	There is no known reason to consider that the Applicant 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 England (PHE)
Brief summary of issues raised
PHE identified the main emissions of potential public health significance as emissions to air of bioaerosols, dust including particulate matter and ammonia. PHE noted that the application contained information on the management of dust (including particulates and bioaerosols), but that the ammonia modelling report did not consider impacts on human health. The Farm Manager's property (adjacent to the installation boundary) is within 100 metres and is considered to be a sensitive residential receptor. PHE also stated that they were in the process of updated its position on bioaerosols from intensive farming facilities. However, the emissions from Spen Farm are considered to present a low risk to human health provided that the facility complies in all respect with Best Available Techniques.
Summary of actions taken or show how this has been covered
We have reviewed the Applicant's dust and bioaerosol risk assessment and approved its management plan. We have also completed an assessment of ammonia emissions at the Farm House, which is in close proximity to the farm unit (approximately 10 metres from the closest source). We have concluded that the predicted environmental concentrations are not likely to exceed the human health Environmental Assessment Levels for ammonia.

Response received from
Environmental Health - Leeds City Council (LCC)
Brief summary of issues raised
LCC were not aware of any noise or odour complains in relation to the previous operation of the site. LCC note that slurry is to be stored within covered circular stores and that the Odour Management Plan (OMP) includes control measures for removal of slurry from the site. LCC recommended a review provision for these control measures and also a condition to ensure that slurry is disposed of in a manner which does not cause complaints at sensitive receptors.
Summary of actions taken or show how this has been covered
All measures within the Applicant's OMP are subject to review on an annual basis or following investigations into any complaints (unless it is established that the odour is not associated with the site). The permit also contains condition 2.3.5 which requires the operator to take appropriate measures in the disposal or recovery of solid manure or slurry to prevent, or where this is not practicable, to minimise pollution.

We did not receive a response from the following consultees: Director of Public Health, Health and Safety Executive and Local Planning Authority (Leeds City Council).