Permitting decisions

Bespoke permit

We have decided to grant the permit for Middlefield Farm operated by John Gilbert Hall, Hazel Margaret Hall, David John Hall, Jillian Clare Hall, Richard John Hall, t/a JG Hall.

The permit number is EPR/XP3501MM.

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.

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 has confirmed their compliance with all BAT conditions for the new Installations in their document reference 'Appendix 2: Non-Technical Summary – – JG Hall, Middlefield Farm' 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 4 kg N/animal place/year (for weaners) and 13 kg N/animal place/year (for production pigs) by an estimation using manure analysis for total Nitrogen content. The Applicant has confirmed their compliance with all BAT conditions for in their document reference 'Appendix 2: Non-Technical Summary – JG Hall, Middlefield Farm', which has been referenced in Table S1.2 Operating Techniques of the Permit. Table S3.3 of the permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 4 Nutritional management - Phosphorous excretion	The Applicant has confirmed it will demonstrate it achieves levels of Phosphorus excretion below the required BAT-AEL of 2.2kg P_2O_5 animal place/year and 5.4kg P_2O_5 animal place/year (for weaners and production pigs) by an estimation using manure analysis for total Phosphorus content. The Applicant has confirmed their compliance with all BAT conditions for in their document reference 'Appendix 2: Non-Technical Summary – JG Hall, Middlefield Farm', which has been referenced in Table S1.2 Operating Techniques of the

BAT measure	Applicant compliance measure
	Permit. 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 phosphorous excretion	Table S3.3 Process monitoring requires the operator to undertake relevant monitoring that complies with these BAT conclusions.
BAT 25 Monitoring of emissions and process parameters - Ammonia emissions	Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 26 Monitoring of emissions and process parameters - Odour emissions	The approved OMP includes the following details for on Farm Monitoring and Continual Improvement: • Odour levels will be monitored on site by all staff. The source of abnormal odours will be identified and appropriate action will be taken to reduce levels back to normal. • The permit operators or their delegate are able and responsible for checking odour emissions daily; checking for any abnormal levels or potential for increased odour production. Site tours will be undertaken daily by the operators or their representative to ensure risks of odours are assessed. Where there is potential for abnormal elevated odour emission, control measures will be put in place to mitigate the risk. Further details can be found within the Odour Management Plan, document reference 'Appendix 8 Odour Management Plan 2021 1', which has been referenced in Table S1.2 Operating Techniques of the Permit.
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 the respective pig types by the number of pigs on site. This is referenced in document reference 'Appendix 2: Non-Technical Summary – JG Hall, Middlefield Farm', which has been referenced in Table S1.2 Operating Techniques of the Permit.
BAT 30 Ammonia emissions from pig houses	The Applicant has confirmed it will demonstrate it achieves levels of ammonia below the required BAT-AEL for the following pig types: Pigs 7 – 30kg (Solid floor – straw system): 0.7 kg NH3/animal place/year. Pigs > 30kg (Solid floor – straw system): 5.65 kg NH3/animal place/year. The Installation does not include an air abatement treatment facility; hence the standard emission factors comply with the BAT AEL.

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.

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 Middlefield Farm (dated September 2021) 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 following is a list of receptors within 400m of the Installation boundary (Including properties owned and occupied/not occupied by the permit holder):

- Housing within Installation boundary x3 (owned by farmer and occupied by family members) – adjacent to the Installation boundary to the north west of pig building 1;
- Cottages x2 (owned by the farmer and rented) – approximately 35m to the east of the Installation;
- Evergreen (neighbouring property) – approximately 145m to the south west of the Installation;
- Ballybrach (Meadowfield Gardens – x2 neighbouring properties) – approximately 125m to the north east of the Installation.

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:

- Odour from feed delivery and storage

- Odour arising from problems with housing ventilation system

- Inadequate air movement in the house leading to high humidity and wet bedding

- Inadequate system design causing poor dispersal of odours

- Odours arising from poorly managed muck and dirty water collection and distribution

- The use of insufficient or poor-quality straw

- Spillage of water from drinking systems

- Disease outbreaks

- Inadequate storage of carcasses on site

- Cleaning and disinfection, removal of manure and dirty water

- Odour arising from manure/dirty water spreading

- Odour arising from manure and dirty water

- Storage – dirty water tanks and FYM middens and field heaps

Odour Management Plan Review

The operator has provided an OMP (September 2021) and this has been assessed against the requirements of 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 (version 2), Appendix 4 guidance 'Odour Management at Intensive Livestock Installations' and our Top Tips Guidance and Poultry Industry Good Practice Checklist (August 2013) as well as the site specific circumstances at the Installation. We consider that the OMP is acceptable because it complies with the above guidance, with details of odour control measures, contingency measures and complaint procedures described below.

The Operator is required to manage activities at the Installation in accordance with condition 3.3.1 of the Permit and its OMP. The OMP includes odour control measures, in particular, procedural controls such as manufacture and selection of feed, feed delivery and storage, ventilation and heating systems, litter management, carcass disposal, house clean out, used litter, washing operations, fugitive emissions, dirty water management, abnormal operations, waste production storage and materials storage. 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 including contingencies for abnormal operations.

The OMP also provides a suitable procedure in the event that complaints are made to the Operator. The OMP is required to be reviewed at least every year (as committed to in the OMP) and/or after a complaint is received, whichever is the sooner.

The Environment Agency has reviewed the OMP and considers 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.

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 H4 Odour management guidance note. Although there is the 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 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 the section 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:

- Noise problems from large and small vehicles travelling to and from the farm

- Feed transfer from lorry to bins and tanks

- Operation of fans on the buildings

- Alarm system and standby generator

- Livestock

- Personnel

- Repairs

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

A noise management plan (NMP) has been provided by the operator as part of the application supporting documentation.

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 year (as committed to in the NMP), 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 to 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. This includes the delivering of feed, and to remove used litter and dirty water. Other operations with the potential to cause noise nuisance for which control measures have been put in place include, feeding equipment, alarm system and stand-by generator, building works and repairs, and animal noise.

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 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 (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 Bio aerosols

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

There are five sensitive receptors either within the Installation boundary or within 100m of the Installation boundary:

- Housing within Installation boundary x3 (owned by farmer and occupied by family members) – adjacent to the Installation boundary to the north west of pig building 1.
- Cottages x2 (owned by the farmer and rented) – approximately 35m to the east of the Installation.

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

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

As there are receptors within 100m of the Installation, the Applicant was required to submit a dust and bioaerosol management plan in this format.

In the guidance mentioned above it states that particulate concentrations fall off rapidly with distance from the emitting source. This fact, together with the proposed good management of the Installation 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 Applicant has identified a range of actions taken to minimise bioaerosols and dust under a range of different possible risks:

- Emissions from feed selection
- Emissions from dirty water and manure storage
- Emissions from yard areas
- Emissions from housing
- Emissions from drinking water systems
- Emissions from natural ventilation
- Emissions from cleanout
- Emissions from carcase storage and disposal

- Emissions from feed storage
- Emissions from dust build up

Please see the relevant plan (dated September 2021) for full details of mitigation measures in place.

Conclusion

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

Ammonia

There are two Sites of Special Scientific Interest (SSSI) located within 5 km of the Installation. There are also eight Local Wildlife Site(s) (LWS), /Ancient Woodland(s) (AW), Local Nature Reserve(s) (LNR) within 2 km of the Installation. There are no Special Areas of Conservation, no Special Protection Areas or Ramsar sites within 5km 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 4.6 (dated 27/01/23) has indicated that emissions from Middlefield Farm will only have a potential impact on SSSIs with a precautionary CLe of 1µg/m^3 if they are within 2384 metres of the emission source.

Beyond 2384m the PC is less than 0.2µg/m^3 (i.e., less than 20% of the precautionary 1µg/m^3 CLe) and therefore beyond this distance the PC is insignificant. In this case all SSSIs are beyond this distance (see table below) and therefore screen out of any further assessment.

Where the precautionary level of 1µg/m^3 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/m^3 level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no likely damage to these sites.

Table 1 – SSSI Assessment

Name of SSSI	Distance from site (m)
Briarcroft Pasture	3853m
Whitton Bridge Pasture	2409m

No further assessment is required.

Ammonia assessment - LWS/AW/LNR

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 4.6 (dated 27/01/23) has indicated that emissions from Middlefield Farm will only have a potential impact on the LWS/AW/LNR sites with a precautionary CLe of 1µg/m^3 if they are within 995 metres of the emission source.

Beyond 995m the PC is less than 1µg/m^3 and therefore beyond this distance the PC is insignificant. In this case the LWS/AW/LNRs are beyond this distance (see table below) and therefore screen out of any further assessment.

Table 2 – LWS/AW/LNR Assessment

Name of LWS/AW/LNR	Distance from site (m)
Thorpe Wood LNR	1269
Fulthorpe Lane Road Verge LWS	1312
Thorpe Pond LWS	1654
Thorpe Wood LWS	1267
Unnamed AW	1268
Unnamed AW	1347

Screening using the ammonia screening tool version 4.6 has determined that the PC on the LWS for ammonia emissions/nitrogen deposition/acid deposition from the application site are under the 100% significance threshold and can be screened out as having no likely significant effect. See results below.

Table 3 - Ammonia emissions

Site	Critical level ammonia µg/m^3	Predicted PC µg/m^3	PC % of critical level
Low Middlefield Farm LWS	3*	1.02	34

* CLe 3 applied as no protected lichen or bryophytes species were found when checking Easimap layer – 27/01/23

Table 4 – Nitrogen deposition

Site	Critical load kg N/ha/yr. *	Predicted PC kg N/ha/yr.	PC % of critical load
Low Middlefield Farm LWS	10	5.298	53

* Critical load values taken from APIS website (www.apis.ac.uk) – 27/01/23

Table 5 – Acid deposition

Site	Critical load keq/ha/yr*	Predicted PC keq/ha/yr.	PC % of critical load
Low Middlefield Farm LWS	1.248	0.378	30.3

* Critical load values taken from APIS website (www.apis.ac.uk) – 27/01/2023

No further assessment is required.

Screening using detailed modelling [A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Existing and Proposed Piggeries at Middlefield Farm, Durham, near Stockton on Tees in Teeside dated 18/05/2022] has determined that the PC on the LWS for ammonia emissions/nitrogen deposition/acid deposition from the application site are under the 100% significance threshold and can be screened out as having no likely significant effect. See results 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 conclusions.

Table 3 - Ammonia emissions

Site	Critical level ammonia µg/m^3	Predicted PC µg/m^3	PC % of critical level
Wynyard Woodland Park LWS	1*	0.944	94.4

* Precautionary CLe of 1 µg/m^3 was used by the applicant. However, we believe that a Cle3 should have been applied as no protected lichen or bryophytes species were found when checking our EASIMAP layer, so this PC as a % of the critical level is an overestimate.

Table 4 – Nitrogen deposition

Site	Critical load kg N/ha/yr. [1]	Predicted PC kg N/ha/yr.	PC % of critical load
Wynyard Woodland Park LWS	10	7.35	73.5

Note [1] Critical load values taken from APIS website (www.apis.ac.uk) – November 2022

There were no results shown for acid deposition but we have estimated this from the nitrogen deposition PC divided by 14.

Table 5 – Acid deposition

Site	Critical load keq/ha/yr. [1]	Predicted PC keq/ha/yr.	PC % of critical load
Wynyard Woodland Park LWS	1.585	0.525	33.1

Note [1] Critical load values taken from APIS website (www.apis.ac.uk) – November 2022

No further assessment is 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: Health and Safety Executive (HSE) Director of Public Health – Stockton-on-Tees Borough Council Local Environmental Health Team – Stockton-on-Tees Borough Council UK Health Security Agency (UKHSA) 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 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 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. We consider that the application will not affect any sites of nature conservation,

Aspect considered	Decision
	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: • The Installation is operated by John Gilbert Hall, Hazel Margaret Hall, David John Hall, Jillian Clare Hall, Richard John Hall, t/a JG Hall and comprises four pig houses, numbered 1-4. There will be 1,000 pigs <30kg and 2,800 pigs >30kg. All pigs will be houses on solid floor, straw-based accommodation. The houses are all naturally ventilated. • Manure generated on site is stored on impermeable concrete areas, situated adjacent to houses 1, 3 and 4 (with an aggregated maximum storage capacity of approximately 50 tonnes), which drains to one of two underground dirty water storage tanks, each with a capacity of 10,000 litres, which also take dirty water from yard areas, the dirty washout water from solid floor buildings and the content of spent disinfectant footbaths. • Though the contents of this tank may have a dry matter content of <1% due to the dilution effect of contaminated rainwater and wash water collection, the inclusion of effluent from manure means that all contents of the underground tank are treated as slurry for the purposes of the permit and the store is therefore covered. • Uncontaminated roof water is collected via gutters and down pipes and is piped and discharged to the ditch at the northern site boundary. For the new buildings, clean water will first discharge to an attenuation pond to the North to mitigate the risk to the watercourse in periods of heavy rainfall. • Slurry and manure are removed from the Installation to be spread on land owned and managed by the operators. • Mortalities are collected daily and stored in a secure container on site and disposed of in accordance with the current Animal by-products regulations and they are collected by a licenced contractor. The proposed techniques for priorities for control are in line with the benchmark levels contained in the Sector Guidance Note EPR6.09 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.

Aspect considered	Decision
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.
Pre-operational conditions	Based on the information in the application, we consider that we need to impose pre-operational conditions. Pre-operational condition PO1 requires the operator to notify the Environment Agency that Installation of the wastewater system, including the storage tank, is complete, and provide written confirmation that the tank has capacity for six months storage of wastewater, in-line with our guidance. They must be done prior to the stocking of the pig unit, as shown on the site plan in Schedule 7 of the permit above the threshold of 2,000 places for production pigs (over 30kg). The condition reads as follows: *At least one calendar month prior to the commencement of construction of wastewater storage tank(s) and/or lagoon(s), the operator shall submit a report demonstrating that:* *a) the installation of the wastewater system, including the storage tank(s) and/or lagoon(s), will be completed in-line with EPR 6.09 Sector Guidance Note, and evidencing that the tank(s) and/or lagoon(s), have capacity for six months storage.* *b) that the ammonia emissions from the installation of the wastewater system, including the storage tank(s) or lagoon(s) when considered in conjunction with the permitted animal places, and any existing slurry storage on site, does not exceed the Environment Agency's relevant thresholds at all nature conservation sites within relevant screening distances.* *c) any relevant management or site plans are revised, including, but not be limited to, an updated site drainage plan.* *The report shall be submitted to the Environment Agency in writing for approval.*
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.
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.
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

Aspect considered	Decision
	how to develop a management system for environmental permits.
Relevant convictions	The Case Management System has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The Operator satisfies the criteria in our guidance on operator competence.
Financial competence	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions.
Growth Duty	
Section 108 Deregulation Act 2015 – Growth duty	We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to vary this permit. 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
UK Health Security Agency – Received 08/11/2022
Brief summary of issues raised
The main emissions of potential public health significance are fugitive emissions to air of bioaerosols, dust including particulate matter, and ammonia. There are several residential properties within 100m distance of the pig housing (i.e., 55m northwest. 60m northeast and 80m north northwest) and several others within 200m. The application includes detailed ammonia dispersion modelling, focusing on the impact on ecological receptors. The predicted resultant concentrations are significantly below the Environmental Assessment Levels (EALs) for impacts on human health. The application includes a dust and bioaerosol management plan and an odour management plan, which identify potential sources and sets out control and mitigations measures for these emissions. In addition, it is noted that there have been no previous odour or dust complaints, and that the new housing is situated towards the western Installation 2 boundary, at greater distance from sensitive receptors. Due to the proximity of residential receptors, routine proactive odour and dust monitoring at the site boundary is recommended. Agriculture in the UK is acknowledged as a significant source of PM10 (particulates with a diameter of less than or equal to 10µm) with the estimated contribution ranging from 5% to 15%. Potential sources of PM10 within the intensive farming industry include feed delivery and storage, dusty wastes, bedding, skin cells, faecal matter and site vehicle movements. Many studies have demonstrated a causal relationship between ambient PM10 levels and hospital admissions for both respiratory and cardiac diseases and mortality4 . Particularly vulnerable receptors include older persons (> 65 years) and, for respiratory illness, children. UKHSA expects that the use of Best Available Techniques (BAT) will minimise the amount of dust released but recommends that the Regulator requests that the applicant reports dust complaints. It is anticipated that further evidence on the potential for intensive farming industries to result in PM10 emissions will become available over the next few years. Consequently, we suggest to the Regulator that the UKHSA should be given the opportunity to incorporate such evidence into future reviews of Environmental Permits. The Environment Agency screen intensive livestock rearing units using a distance of 100m to the nearest sensitive receptor(s). This is based on a 2009 DEFRA report. Should it be identified by the applicant that there are sensitive receptors within 100m from the boundary of such units the applicant is required to carry out a bioaerosol risk assessment. UKHSA is currently updating its Intensive Farming position paper as part of wider work on the health impacts on exposure to bioaerosols from intensive farming. The evidence base for human exposure to bioaerosols from intensive livestock rearing units remains limited, compared to composting facilities. The nature of the evidence that is available however indicates that there are differences between both sources (pig or poultry). The nature of the bioaerosols (fungal or bacteriological) is also important. In relation to intensive farming and bioaerosols, a recent systematic review describes the evidence base which clearly demonstrated that published studies have so far detected inconsistent results with studies reporting no effect, mixed effects, harmful effects and protective effects. In addition, studies conducted to date have typically been cross-sectional in design, hindering the ability to assign effects to farming exposure. It is assumed by UKHSA that the Installation will comply in all respects with the requirements of the permit, including the application of BAT. This should ensure that emissions present a low risk to human health. More information is available on the public health impacts of intensive farms in the UK Health Security Agency

Position Statement which can be found at: http://webarchive.nationalarchives.gov.uk/20140714084352/http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1195733812766
Summary of actions taken or show how this has been covered
The Environment Agency is satisfied following a review of the information provided by the Applicant, and the conditions present within the permit, that the Installation will not pose an unacceptable risk of pollution to the environment or harm to human health. To prevent significant emissions from the site the Operator has proposed appropriate measures to manage dust and bio aerosols - a generic risk assessment has been provided by the Operator, which incorporates dust as a potential risk from the site, together with a dust and bio aerosols management plan. This includes the use of appropriate housing design and management and appropriate containment of feedstuff. We are satisfied that these measures will appropriately mitigate emissions to prevent a significant impact from the site. Notwithstanding the above, Condition 3.2 of the environmental permit also deals with emissions of substances not controlled by emission limits. Under this condition, if notified by the Environment Agency that the activities are giving rise to pollution, the Operator must submit an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits.

Response received from
Health & Safety Executive (HSE) – 18/10/2022
Brief summary of issues raised
With regards to the application below, I am emailing to advise you that HSE have no comments to make.
Summary of actions taken or show how this has been covered
No action required.

Response received from
Stockton Borough Council – Received 18/10/2022
Brief summary of issues raised
I have read the documentation provided and can confirm there are no existing or historical noise or other amenity issues in the area held by the Environmental Health Department. I do have concerns from a Local Authority perspective that the site will cause odour complaints from residential premises in the area and would ask the Environment Agency to ensure all possible mitigations are implemented.
Summary of actions taken or show how this has been covered
The Environment Agency is satisfied following a review of the information provided by the Applicant (including an Odour Management Plan), and the conditions present within the permit, that emissions of odour from the Installation will not pose an unacceptable risk of pollution to the environment or harm to human health.

The director of Public health was also contacted, but they did not respond.