

Permitting decisions

Bespoke permit

We have decided to grant the permit for Carr Farm Poultry Unit operated by V Wilkins & Sons Limited.

The permit number is EPR/KP3405PP.

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 <u>decision checklist</u> 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.

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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 installation, in a document titled 'Carr Farm' submitted with the application, which has been referenced in Table S1.2 Operating Techniques of the permit.

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 0.8 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 0.45kg 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 - 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	Table S3.3 of the permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.

BAT measure	Applicant compliance measure
parameters - Ammonia emissions	
BAT 26 Monitoring of emissions and process parameters - Odour emissions	The approved odour management plan (OMP) includes the following details for on Farm Monitoring and Continual Improvement:
	 On a daily basis, odour levels at the Installation will be monitored for high housekeeping odours - this will involve twice daily olfactory checks with any abnormalities recorded and investigated.
BAT 27 Monitoring of emissions and process parameters - Dust emissions	Table S3.3 concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions. The Applicant will report the dust emissions to the Environment Agency annually by calculation using the standard dust emissions factor for layer hens.
BAT 31 Ammonia emissions from poultry houses - Laying hens	The BAT-AEL to be complied with is 0.02 – 0.13 kg NH3/animal place/year. The Applicant will meet this as the emission factor for free range laying hens in an aviary housing system is 0.08 kg NH ₃ /animal place/year. The installation does not include an air abatement treatment facility, hence the standard emission factor complies 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 31

The new BAT Conclusions include a set of BAT-AELs for ammonia emissions to air from animal housing for laying hens

'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-AELs.

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 Carr Farm Poultry Unit (dated 06/04/2019) demonstrates that there are no hazards or likely pathways 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 the Applicant has 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 include:

- Manufacture and selection of feed
- Feed delivery and storage
- Ventilation systems
- Litter management
- Housing system/litter
- Carcass disposal

- House clean out (de littering)
- House clean out (Disinfection and fumigation)

Odour Management Plan Review

The Installation is located within 400m of a number of sensitive receptors, as listed in the odour management plan, with the majority of properties situated on Carr Road and Station Road.

The Operator produced an OMP with the application 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 feed delivery, storage and distribution, ventilation systems, carcass storage, cleaning out of livestock, storing and spreading of manure and slurry, and dirty water management. The operator has identified potential sources of odour (see risks bullet pointed above), as well as the potential risks and problems, and detailed actions taken to minimise odour.

The 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 4 years 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.

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 'Noise Management Plan Review' below.

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

- Ventilation fans
- Feed deliveries
- Egg collection
- Maintenance and repairs
- Vehicles on site (including feed deliveries, removal of dirty water, manure and carcasses)
- Feed transfer from lorry to feed bins
- Noise from the chickens / bird catching

Alarm system and standby generator

Noise Management Plan Review

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

A noise management plan (NMP) has been provided by the operator) as part of the application supporting documentation (reference 'Noise Management Plan' (Version November 2018).

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

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

We have included our standard noise and vibration condition 3.4.1 in the Permit, which requires that emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the Installation, as perceived by an authorised officer of the Environment Agency, unless the Operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan (which is captured through condition 2.3 and Table S1.2 of the Permit), to prevent or where that is not practicable to minimise the noise and vibration.

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

Conclusion

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

Dust and 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 three sensitive receptors within 100m of the installation boundary, the nearest sensitive receptor (the nearest point of their assumed property boundary) is immediately to the east of the installation boundary.

The Applicant has provided a dust and bio aerosol risk assessment.

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 bio aerosol management in this format.

EPR/KP3405PP/A001 Date issued: 09/09/19 In the guidance mentioned above it states that particulate concentrations fall off rapidly with distance from the emitting source. This fact, together with the proposed good management of the installation (such as keeping areas clean from build-up of dust and other measures in place to reduce dust and the risk of spillages) (e.g. litter and feed management/delivery procedures) all reduce the potential for emissions impacting the nearest receptors. The Applicant has confirmed the following measures in their operating techniques to reduce dust (for full details please refer to Dust and Bioaerosol Management Plan dated 07/07/2019 version 2, July 2019):

- Feed Vents from silos covered to prevent release, no milling is undertaken at site, with the use of
 pelleted feed with an oil coating. Piped delivery of feed into poultry houses is sealed and pan feeding
 systems on timed feeding preventing over feeding.
- Feed spillages Any feed spills cleared up immediately.
- Feed bins and delivery pipe work Daily visual checks on integrity of bins and pipework.
- Bedding Use of dust extracted shavings with the material spread inside the house with minimum ventilation in to minimise dust release.
- Litter management computer controlled environment to control humidity.
- Stock inspections Light levels reduced to reduce stress on birds resulting in less dust being created.
- Ventilation High velocity extraction fans on houses 1 and 2 which will increase dispersion.
- House cleaning Litter is placed into trailers positioned at the entrance to each house to ensure no double handling; No storage of used litter on site; Litter transported in covered trailers.

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 is one Site of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also five Local Wildlife Site(s) (LWS), /Ancient Woodland(s) (AW) within 2 km of the installation.

<u>Ammonia assessment – SSSI</u>

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 incombination 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 Carr Farm Poultry Unit will only have a potential impact on a SSSI with a precautionary CLe of 1µg/m³ if they are within 916 metres of the emission source.

Beyond 916m the PC is less than $0.2\mu g/m^3$ (i.e. less than 20% of the precautionary $1\mu g/m^3$ 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 $1\mu g/m^3$ 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 $1\mu g/m^3$ 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)
Kirmington Pits SSSI	4224m

No further assessment is required.

Ammonia assessment - LWS/AW

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

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

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Carr Farm Poultry Unit will only have a potential impact on the LWS/AW sites with a precautionary CLe of 1µg/m³ if they are within 320 metres of the emission source.

Beyond 320m the PC is less than $1\mu g/m^3$ and therefore beyond this distance the PC is insignificant. In this case all LWS/AWs are beyond this distance (see table below) and therefore screen out of any further assessment.

Table 2 - LWS/AW Assessment

Name of LWS/AW	Distance from site (m)
Ulceby Meadow LWS	1451m
Alder Carr Wood LWS	2231m
Alder Wood LWS	2379m
Unknown AW	2233m
ALDER WOOD AW	2390m

No further assessment is necessary.

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:		
	Public Health England (PHE) and Director of Public Health (DoPH)		
	Local Authority Environmental Health		
	Health and Safety Executive (HSE)		
	The comments and our responses are summarised in the consultation section.		
Operator	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 facility		
The regulated facility	We considered the extent and nature of the facility at the site in accordance with RGN2 'Understanding the meaning of regulated facility'.		
	The extent of the facility is defined in the site plan and in the permit. The activities are defined in table S1.1 of the permit.		
The site			
Extent of the site of the facility	The Operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility. The plan is included in the permit.		
Site condition report	The Operator has provided a description of the condition of the site, which we consider is satisfactory. The decision was taken in accordance with our guidance on site condition reports 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 asse	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:		
	 There are two poultry houses (numbered 1 and 2), which operate a multi-tier aviary system and are ventilated by roof fans with an emission point higher than 5.5 metres above ground level and a efflux velocity greater than 7m/s; 		
	Both poultry houses have gable end fans, although these are operated infrequently to maintain temperature, typically in the summer months;		
	Manure is removed by belts from both poultry houses twice each week with all manure exported from the Installation for spreading on operator owned land;		
	Water from the wash out of poultry houses is channelled to underground collection tanks to await export from the site;		
	Spent disinfectants are added to the dirty water collection tanks;		
	 Roof water from both houses drain to soakaways present to the west of the poultry houses. Water draining from the yard (excluding periods of washout when water from the yard drains to the underground tanks) drain to the same soakaways; 		
	Mortalities are collected daily and stored in a secure container on site for removal by a licenced renderer.		
	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.		
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	Based on the information in the application, we consider that we do not need to impose		

Aspect considered	Decision
than those from the template	conditions other than those in our permit template.
Emission limits	We have decided that emission limits are required in the permit. BAT AELs have been set 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.
	These monitoring requirements have been imposed in order to ensure compliance with Intensive Farming BAT conclusions document dated 21/02/17.
Reporting	We have specified reporting in the permit.
	We made these decisions in order to ensure compliance with Intensive Farming BAT conclusions document dated 21/02/17.
Operator competence	
Management system	There is no known reason to consider that the Operator will not have the management system to enable it to comply with the permit conditions.
	The decision was taken in accordance with the guidance on operator competence and how to develop a management system for environmental permits.
Relevant convictions	The Case Management System 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

Aspect considered	Decision
	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) - received 30/07/2019

Brief summary of issues raised

The main emissions of potential public health significance are emissions to air of bioaerosols, dust including particulate matter and ammonia. The applicant has carried out appropriate risk assessments in these areas and concluded the sites will not pose unacceptable impacts with the proposed mitigation and management measures.

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.

PHE 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 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.

More information is available on the public health impacts of intensive farms in the Public Health England 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 emissions of odour and noise from 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 bioaerosols - a specific risk assessment has been provided by the Operator, together with a dust and bioaerosols 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.