

# Determination of an Application for an Environmental Permit under the Environmental Permitting (England & Wales) Regulations 2016

## Our decision document recording our decision-making process

The Permit Number is: **EPR/BP3003MP**

The Applicant is: **T L Whittall Limited**

The Installation is located at: **Hergest Camp Farm  
Lower Hergest  
Kington  
Hereford  
Herefordshire  
HR5 3ER**

Application consultation commenced on: **16/05/2022**  
Application consultation ended on: **14/06/2022**

Draft decision consultation commenced on: **17/05/2024**  
Draft decision consultation ended on: **18/06/2024**

## Environment Agency permitting decisions

### What this document is about

This is a decision document, which accompanies a permit.

It explains how we have considered the Applicant's application, and why we have included the specific conditions in the permit we are proposing to grant. It is our record of our decision-making process, to show how we have taken into account all relevant factors in reaching our position. Unless the document explains otherwise, we have accepted the Applicant's proposals.

We have made our final decision only after carefully taking into account all relevant matters including those in the consultation responses we received.

### Preliminary information and use of terms

We gave the application the reference number EPR/BP3003MP/A001. We refer to the application as "the **Application**" in this document in order to be consistent.

The number we propose to give to the permit is EPR/BP3003MP. We refer to the proposed permit as "the **Permit**" in this document.

The Application was duly made on 11/04/2022.

The Applicant is T L Whittall Limited. We refer to T L Whittall Limited as “the **Applicant**” in this document. Where we are talking about what would happen after the Permit is granted (if that is our final decision), we call T L Whittall Limited “the **Operator**”.

The proposed facility is located at Hergest Camp Farm, Lower Hergest, Kington, Hereford, Herefordshire, HR5 3ER. We refer to this as “the **Installation**” in this document.

We are minded to grant the Permit for the Installation operated by the Applicant. We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the Permit will ensure that a high level of protection for the environment and human health is provided.

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## 1. Our proposed decision & legal framework

We are minded to grant a Permit to the Applicant. This will allow the Applicant to operate the Installation, subject to the conditions in the Permit.

We consider that, in reaching that decision, we have taken into account all relevant considerations and legal requirements and that the Permit will ensure that a high level of protection is provided for the environment and human health.

The Permit will be granted, under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016 (the “Permitting Regulations”). The Permitting Regulations deliver most of the relevant legal requirements for activities falling within its scope and implement relevant retained EU law. In particular, the regulated facility is an Installation and an intensive poultry farm as described by the Permitting Regulations and the Industrial Emissions Directive (IED). The Permit implements the requirements of IED in respect of the Installation.

It is also subject to aspects of other relevant legislation, beyond the Permitting Regulations, which also have to be addressed.

We explain how we have addressed specific statutory requirements more fully in the rest of this document. Where not covered elsewhere we set out how we have addressed relevant legal requirements in section 5.2 of this document.

The Permit contains many conditions taken from our standard Environmental Permit template including the relevant Annexes. We developed these conditions in consultation with industry, having regard to the legal requirements of the Permitting Regulations and other relevant legislation. This document does not therefore include an explanation for these standard conditions. Where they are included in the Permit, we have considered the Application and accepted the details are sufficient and satisfactory to make the standard condition appropriate.

## **2. How we reached our draft decision**

### **2.1 Receipt of Application**

The Application was received on 8 September 2021; however, we required further information from the Applicant in order for us to consider the Application duly made. This information was requested on 29 March 2022. The Applicant submitted additional information in response to the request on 30 March 2022 and 11 April 2022, and the response were deemed sufficient to enable us to duly make the Application.

The Application was duly made on 11 April 2022. This means we considered it was in the correct form and contained sufficient information for us to begin our determination; but not that it necessarily contained all the information we would need to complete that determination.

Although we were able to consider the Application duly made, we did in fact need more information in order to determine it, therefore we issued requests for further information. We issued a request for information on 04/07/2022 and received responses on 10/08/2022 and further requests for information were issued on 13/12/2022, 28/02/2023, 06/03/2023, 21/03/2023, 05/04/2023, 11/04/2023, 19/06/2023, 14/03/24 and received responses to these requests on 07/02/2023, 28/02/2023, 30/03/2023, 03/04/2023, 11/04/2023, 26/06/2023 and 15/03/2024. Additional information was also provided by the Applicant on 28/06/2023 and 29/06/2023.

Copies of the above requests and responses have been placed on our public register.

### **2.2 Consultation on the Application**

We carried out consultation on the Application in accordance with the Permitting Regulations, our statutory Public Participation Statement (PPS) and our own Regulatory Guidance Note (RGN) 6 for Determinations involving Sites of High Public Interest. We consider that this process satisfies, and frequently goes beyond, the requirements of the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. We have also taken into account our obligations under the Local Democracy, Economic Development and Construction Act 2009 (particularly Section 23). This requires us, where we consider it appropriate, to take such steps as we consider appropriate to secure the involvement of representatives of interested persons in the exercise of our functions, by providing them with information, consulting them or involving them in any other way. In this case, our consultation already satisfies the Act's requirements.

We advertised the Application by a notice placed on our website from 16 May 2022 – 14 June 2022, which contained all the information required by the IED, including telling people where and when they could see a copy of the Application.

We placed a copy of the Application and all other documents relevant to our determination (see below) on our Public Register. Anyone wishing to see these documents could do so and arrange for copies to be made. We also published this Application on our webpages on GOV.UK and made available electronic copies of the Application on that webpage.

We sent copies of the Application to the following bodies, which includes those with whom we have "Working Together Agreements":

- Herefordshire Council (Environmental Health)
- UK Health Security Agency (UKHSA)
- Director of Public Health, Herefordshire County Council
- Health and Safety Executive (HSE)

These are bodies whose expertise, democratic accountability and/or local knowledge make it appropriate for us to seek their views directly.

Under our Working Together Agreement with Natural England, we only inform Natural England of the results of our assessment of the impact from the Installation on designated habitats sites. In this circumstance, we were not required to inform them of our assessment. Please see section 4.1 for further details of our assessment, which discusses the potential impacts of ammonia from the Installation on designated habitats sites.

Details along with a summary of consultation comments and our response to the representations we received can be found in Annex 1. We have taken all relevant representations into consideration in reaching our determination.

## **3 The Installation – description and related issues**

### **3.1 The permitted activities**

The Installation is subject to the Permitting Regulations because it carries out an activity listed in Part 2 of Schedule 1 of those regulations, namely:

- Section 6.9, Part A(1)(i) – Rearing of poultry intensively in an installation with more than 40,000 places for poultry

The IED defines “poultry” by reference to Directive 90/539/EEC on animal health, which defines that term as:

“fowl, turkeys, guinea fowl, ducks, geese, quails, pigeons, pheasants and partridges reared or kept in captivity for breeding, the production of meat or eggs for consumption, or re-stocking supplies of game.”

The Applicant intends to intensively rear up to 215,000 chickens (fowl) at the Installation, so falls within the activity mentioned above.

### **3.2 The site location and surroundings**

Hergest Camp Farm is situated approximately 2.5 kilometres southwest of Kington, Hereford. The Installation is approximately centred on National Grid Reference SO 27597 54676.

The Applicant submitted a plan showing the site of the Installation and its extent. We consider this plan is satisfactory. It is included in Schedule 7 to the Permit, and the Operator is required to carry out the permitted activities within the Installation boundary.

We have undertaken screening to identify potentially sensitive receptors in the area surrounding the Installation. This identified the following:

- there are approximately 30 residential properties (not associated with the farm) within 400m of the Installation boundary, the nearest residential properties being situated at Arrow View, approximately 120m from the Installation boundary; and
- there is 1 residential property within 100m, which is associated with the farm.
- there are no Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsars within 5km of the Installation boundary.
- there are nine Sites of Special Scientific Interest (SSSI) within 5km of the Installation boundary and
- there are 37 other nature conservation sites within 2km, which consist of 19 Local Wildlife Sites (LWS) and 18 Ancient Woodland (AW).

As explained below, we have taken into consideration the potential environmental impact of the activity on all sensitive receptors, including residential, commercial and nature conservation sites.

### **3.3 What the Installation does and proposed site design**

The Installation is operated by T L Whittall Limited and comprises six poultry houses, numbered one to six, for broilers. The six poultry houses provide a combined capacity for 215,000 bird places. The houses are stocked with day-old chicks, which are grown until they

reach slaughter weight (approximately 36-39 days of age); with thinning taking place at approximately 29-33 days of the growth cycle, where approximately 30% of the birds are taken. There is approximately seven days between cycles. This equates to approximately eight cycles each year.

All poultry houses are ventilated by high velocity roof fans with emission point higher than 5.5 metres above ground level and an efflux speed at or greater than 7 metres per second. All houses also have gable end fans, although these are operated infrequently to maintain temperature, typically during times of hot weather.

Birds are fed a minimum of three diets during their growth, with gradually reducing levels of protein and phosphorus as bird age increases. Feed is delivered from an accredited feed mill and blown into bulk feed bins situated at the ends of the houses and distributed to the birds via a pan feeding system. Water is supplied to the livestock via a nipple drinking system fitted with cups to reduce leakage and spills.

At depletion, the litter is removed from the site and sold to a third party and spread to land. Water from the wash out of poultry houses is channelled to underground dirty water collection tanks to await export from the site. In addition, spent footbath disinfectants is added to the storage tanks. Wash water is spread (in accordance with a manure management plan for the receiving land and NVZ rules, if applicable) on Operator-owned land control or with a contingency of a licensed disposal company. Heating for the poultry houses is provided by LPG heaters.

Roof water from the poultry houses and yard water (excluding all times yards are contaminated e.g. catching, mucking out or washing, when water from the yard drains to the underground dirty water tanks) from between poultry houses 1 – 4 drain to either French drains, which sit adjacent to poultry houses 1 - 4, or to clean water drains adjacent to houses 1 and 3, which ultimately drain to the River Arrow via settlement chambers/sediment traps, situated immediately to the north west of poultry house 1. Yard water (excluding all times yard is contaminated e.g. catching, mucking out or washing, when water drains to underground dirty water tanks) from the south of poultry houses 1 – 4 drains to a soakaway pond via a pipe to the southwest of poultry house 1. Roof water from poultry houses 5 and 6 and clean yard water from between and to the north and south of houses 5 and 6 (excluding all times yards are contaminated e.g. catching, mucking out or washing) is collected via gutters, downpipes and clean water drains, and drains via an underground pipe to a stone filled underground soakaway, which is covered with grass, to the north of houses 5 and 6. Yard water (excluding all times yard is contaminated e.g. catching, mucking out or washing, when water from the yard drains to underground dirty water tanks) from the north of poultry house 6 drains via two outlets in the kerb wall, to a stone filled soakaway. There is an outlet to the River Arrow, via settlement chambers/sediment traps (situated immediately to the northwest of poultry house 1), which receives clean yard water (excluding all times yards are contaminated e.g. catching, mucking out or washing, when water from the yard drains to the underground dirty water tanks) from the yard to the north of poultry houses 1 – 4. During clean out operations a diverter valve is used to channel yard surface water to the underground dirty water collection tanks for exporting off site to be spread on Operator owned land.

The land around the site is predominantly agricultural. The surrounding topography is relatively flat and low lying. Associated food is stored on the Installation in sealed food bins. Fallen stock during the production cycle are collected and recorded daily and stored in freezers in a purpose-built building on site. The carcasses are collected regularly (once a week at the start of the cycle, rising to three times per week near to the end of the cycle) by a licensed collection agent under the National Fallen Stock Scheme. At the end of the cycle the houses are depopulated, washed, and disinfected ready for the next cycle.



There are point source emissions from the Installation to air, water and land. Details of how we have addressed these can be found in the Permit and elsewhere in this document.

The key features of the Installation are summarised in table 2 below.

<b>Operational features</b>	<b>Description</b>		
Broiler rearing	215,000 broilers are brought onto the farm at approximately 1 day old, with a proportion being thinned at around 29-33 days of age, with depletion of the remaining birds between approximately 36-39 days of age.		
Poultry house ventilation	High velocity roof fans (at a height of at least 5.5m and an efflux velocity of at least 7m/s).		
Litter/manure management	At depletion all litter is sold to a third party with none being spread either within the Installation boundary or on Operator owned land Litter is not stored at the Installation.		
Waste water management	Wastewater is directed to underground collection tanks close to the poultry houses to await export off site.		
Carcass management	Fallen stock during the production cycle are collected and recorded daily and will be stored in freezers in a purpose-built building, with collection being twice weekly during the crop cycle with the frequency increasing during the summer months and with crop age (three times per week) prior to disposal and then removed by a licenced individual, in accordance with Animal By-Products Regulations.		
Site drainage	Clean roof water from the poultry houses and clean yard surface water (excluding periods of washout when water from the yard drains to the underground tanks) drain to French drains, which sit adjacent to the poultry houses, clean water drains and to soakaways, with an outfall to the River Arrow, via a settlement pit and sediment traps, also being in place. During clean out operations a diverter valve is used to channel yard surface water to the wash water collection tanks for exporting off site to be spread on operator owned land.		
Storage and use of raw material	Description	Maximum amount stored	Annual throughput
	Biocides (including disinfectants)	600 litres	3,900 litres
	Pesticides (including rodenticides/ insecticides)	5 litres	3 litres
	Veterinary medicines	215,000 doses	1.6 million doses
	Bedding (straw/ shavings)	8 tonnes	60 tonnes
	Diesel	1,300 litres	800 litres
	Gas	32,000 litres	120,000 litres

The Application has been assessed in line with our guidance: [EPR 6.09 Sector Guidance Note – How to comply with your environmental permit for intensive farming \(EPR 6.09\) \(version 2\)](#) which can be viewed at the following link:

[www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/297084/geho0110brsb-e-e.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297084/geho0110brsb-e-e.pdf)

and the Best Available Techniques Reference Document (BREF) for the Intensive Rearing of Poultry or Pigs (IRPP), which was published on 21 February 2017. There is a separate Best

Available Techniques (BAT) Conclusions document which sets out the standards that permitted farms have to meet.

The BAT Conclusions document is available via the following link:

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D0302&from=EN>

The techniques proposed by the Applicant meet the requirements set out in this guidance and are considered to be the best available techniques (BAT) for a broiler unit of this size. It is a requirement of the Permit that the poultry unit is operated in line with this guidance. Section 4.8 below provides details of the BAT Conclusions and the standards that permitted farms have to meet.

The Applicant has confirmed that the operation of the farm will be in accordance with the relevant sections of our sector guidance note 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 (version 2) and will meet all the new relevant BAT conclusions along with the new BAT AELs.

## 4. Key issues of the decision

The key issues arising during this determination were as follows:

- 4.1 The possible impact of ammonia on sensitive local ecological receptors
- 4.2 The possible impact of ammonia on human receptors
- 4.3 The possible associated loss of amenity linked to odour emissions arising from the Installation
- 4.4 The possible associated loss of amenity linked to noise emissions arising from the Installation
- 4.5 The possible impact of dust / bioaerosols on human receptors
- 4.6 The possible impact of site drainage on groundwater and surface water
- 4.7 The possible impact of pests
- 4.8 Changes arising as a result of the New Intensive Rearing of Poultry or Pigs BAT Conclusions document
- 4.9 Pre-operational conditions and improvement programme
- 4.10 Spreading of manure and wash water to agricultural land

We therefore describe how we determined these issues in some detail in this document below.

### 4.1 Ammonia Emissions – Ecological Receptors

Given the nature of the proposed activity, there is the potential for atmospheric ammonia to be released into the environment and impact nearby sensitive habitats and species. For this reason, we have carried out an assessment of the risk.

Emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) from farms may lead to both direct and indirect effects on vegetation. Nitrogen deposition can lead to acidification of the ecosystem or act as a fertiliser, leading to nutrient enrichment and subsequent changes in the structure of the habitat.

The Conservation of Habitats and Species Regulations 2017 (which implements the Habitats and Birds Directives) provides protection in law for Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). Government policy is that Ramsar sites are also treated in the same way as SACs and SPAs. Before granting the Permit, we must determine whether the Installation would be likely to have a significant effect on a SAC, SPA or Ramsar site. If it would, we may only grant the Permit after carrying out an appropriate assessment and ascertaining that the Installation will not adversely affect the integrity of a SAC, SPA or Ramsar site or else that an exception applies.

The Wildlife and Countryside Act 1981 provides protection in law for SSSIs. Before granting the Permit, we must determine whether the Installation is likely to damage any of the flora, fauna or geological or physiographical features by reason of which a SSSI is designated. If it is, we may only grant the Permit after notifying Natural England, waiting 28 days, and taking any advice we receive from them into account.

The above legislation, as well as other legislation such as the Environment Act 1995 and the Natural Environment and Rural Communities Act 2006, provides additional protection for flora

and fauna whether or not existing in specifically designated conservation sites. We set out below how we have assessed the Application in view of this legislation.

To determine whether the Installation is likely to have a significant effect on a SAC, SPA or Ramsar site, and whether it is likely to damage any of the relevant features of a SSSI, we consider the impact of the Installation in combination with other sources of potential impacts. This is done by considering the Installation's process contribution (PC) and the background levels.

When assessing the Installation's likely impact on flora and fauna more generally (including within other sites such as National Nature Reserves (NNRs), Local Nature Reserves (LNRs), Local Wildlife Sites (LWSs) and Ancient Woodlands (AW)) we look at the impact from the Installation alone in order to determine whether it would cause significant pollution. This is a proportionate approach, in line with the levels of protection offered by the conservation legislation to protect these other sites (which are generally more numerous than SACs, SPAs, Ramsar sites or SSSIs). It also allows us to strike a balance with other legal duties we are subject to, such as 'to have regard to the desirability of promoting economic growth', by ensuring that we do not unnecessarily restrict development.

Critical levels and loads<sup>1</sup> are set to protect the most vulnerable habitat types.

Critical levels are defined as "*concentrations of pollutants in the atmosphere above which direct adverse effects on receptors, such as human beings, plants, ecosystems or materials, may occur according to present knowledge*". (Source: [https://www.icpmapping.org/Definitions\\_and\\_abbreviations](https://www.icpmapping.org/Definitions_and_abbreviations))

Critical Loads are defined as: "*a quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge*" (Source: [https://www.icpmapping.org/Definitions\\_and\\_abbreviations](https://www.icpmapping.org/Definitions_and_abbreviations))

The **critical load** relates to the quantity of pollutant **deposited** from air to the ground, whereas the **critical level** is the gaseous **concentration** of a pollutant in the air.

Thresholds change in accordance with the levels of protection afforded by the legislation. Therefore, the thresholds for SAC, SPA and SSSI features are more stringent than those for other nature conservation sites. For these other sites we consider that the Installation would not cause significant pollution if the PC were less than the relevant critical level (CLe) or critical load (CLo), provided that the Applicant will be using BAT to control emissions.

The screening assessment has considered any SACs, SPAs, Ramsar sites and SSSIs within 5km of the Installation boundary and any other nature conservation sites (including NNRs, LNRs, Ancient Woodlands and LWSs), within 2km of the Installation boundary. There are nine Sites of Special Scientific Interest (SSSI) within 5km of the Installation boundary.

There are 37 other nature conservation sites within 2km, which consist of 19 Local Wildlife Sites (LWS) and 18 Ancient Woodland (AW).

There are no SACs, SPAs or Ramsar sites within 5km of the Installation boundary.

We have used the Environment Agency's Ammonia Screening Tool, version 4.6 (AST v4.6) to assess the predicted impact of the Installation at those sites identified within the above distance criteria.

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<sup>1</sup> Critical loads and levels have been used by the United Nations Economic Commission for Europe (UNECE) to set targets for reductions in acid rain and the effects of nitrogen on sensitive ecosystems. The system used to work out critical loads has been agreed by the UNECE and is used by individual countries to calculate appropriate standards. Critical levels for key pollutants, such as ammonia, are proposed by a UNECE working group of international experts on the effects of air pollutants on ecosystems. Critical loads and levels provide the best available scientific information on the effects of pollutants on ecosystems.

We have applied two stage screening criteria to the ammonia screening tool results, as follows:

Stage 1 - Where the ammonia screening tool predicts that emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) will be <Y% (for Y%, see Table 3 below) of the relevant CLe or CLo, the Installation does not require a more detailed ammonia assessment (it is 'screened out').

Stage 2 - Further modelling is required (the Installation is not 'screened out') where:

- emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) are in excess of Z% (for Z%, see Table 3 below) of the relevant CLe (ammonia) or CLo (nutrient nitrogen or acid) at SSSIs and/or other nature conservation sites (e.g. NNR, LNR, LWS, ancient woodland); or
- emissions of ammonia or ammonia deposition (nutrient nitrogen or acid) are in excess of Y% of the relevant CLe or CLo for a SAC, SPA or Ramsar site (although in this case there as described above, no SAC, SPA or Ramsar sites within 5km); or
- there is the potential for an in-combination effect with existing farms at a SSSI if emissions are >Y% of the CLe or CLo; or
- the Installation is within 250m of a nature conservation site.

<b>Designation</b>	<b>Y%</b>	<b>Z%</b>
SAC, SPA, Ramsar site	4	N/A
SSSI	20	50
NNR, LNR, LWS, Ancient Woodland	100	100

The nature conservation site assessment takes into account the United Nations Economic Commission for Europe (UNECE) CLes for ammonia, which have been applied as follows:

- sites with sensitive Lichen or Bryophyte interest and habitats for which sensitive lichens and bryophytes are an integral part:  $1\mu\text{g}/\text{m}^3$ ; and
- other vegetation:  $3\mu\text{g}/\text{m}^3$ .

The assessment also considers the deposition of ammonia resulting in nutrient enrichment (and acidification) against relevant CLos. However, where a CLe of  $1\mu\text{g}/\text{m}^3$  is assigned, we believe the CLe is protective enough for deposition impacts and so no deposition assessments are necessary in this instance. Where a CLe of  $3\mu\text{g}/\text{m}^3$  is applied, deposition is considered as part of the assessment.

A 20% trigger threshold is applied for assessment of SSSIs such that:

- if the process contribution (PC) is below 20% of the relevant critical level (CLe) or critical load (CLo) then the Installation is not considered likely to damage any of the relevant features of a SSSI and can be permitted with no further assessment; and
- Where this threshold is exceeded an assessment alone and in combination is required.

A 100% trigger threshold is applied for the assessment of LWSs such that:

- 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.

### **Ammonia assessment – SSSI**

Initial screening using the ammonia screening tool version 4.6 (re-checked February 2024) has indicated that emissions from Hergest Camp Farm will only have a potential impact on SSSIs with a precautionary CLe of  $1\mu\text{g}/\text{m}^3$  if they are within 1261 metres of the emission source.

Beyond 1261m the PC is less than  $0.2\mu\text{g}/\text{m}^3$  (i.e. less than 20% of the precautionary  $1\mu\text{g}/\text{m}^3$  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  $1\mu\text{g}/\text{m}^3$  is used for the CLe, and the PC is assessed to be less than the 20% screening threshold, it is not necessary to further consider nitrogen deposition or acid deposition critical load values as the impact from deposition will be even less. In this case the  $1\mu\text{g}/\text{m}^3$  level used has not been confirmed by Natural England, but it is precautionary. We conclude no likely damage to the special features of all SSSIs, listed in table 4 below.

**Table 4 – SSSI Assessment**

<b>Name of SSSI</b>	<b>Distance from site (m)</b>
Bushy Hazels & Cwmma Moors	3,465
Upper Welson Marsh	3,470
Queestmoor Meadow	3,838
Quebb Meadow	3,551
Birches	2,156
Bradnor Hill Quarry	3,333
Dolyhir Quarry	4,475
Dolyhir Meadows	4,549
Stanner Rocks	3,840

### **Ammonia assessment - LWS/AW**

Initial screening using ammonia screening tool version 4.6 (re-checked February 2024) has indicated that emissions from Hergest Camp Farm will only have a potential impact on the LWS/AW sites with a precautionary CLe of  $1\mu\text{g}/\text{m}^3$  if they are within 441 metres of the emission source. Where the precautionary level of  $1\mu\text{g}/\text{m}^3$  is used, and the PC is assessed to be less than the 100% screening threshold it is not considered necessary to further assess nitrogen deposition or acid deposition critical load values as the impact from deposition will be even less.

Beyond 441m the PC is less than  $1\mu\text{g}/\text{m}^3$  and therefore beyond this distance the PC is considered insignificant. In this case most of the LWS/AWs are beyond this distance (see table below) and therefore screen out of any further assessment.

**Table 5 – LWS/AW Assessment of sites that screen out**

<b>Name of LWS/AW</b>	<b>Distance from site (m)</b>
Land at Bank Farm LWS	1,163
Land near Bank Farm LWS	993
Land near Park Stile Mill LWS	1,096
Land at Chickward (3) LWS	1,277
Land at Pound Farm (Fields at Pound Farm) LWS	928
Land at Chickward (2) LWS	1,458
Castle Twts LWS	741
Pond near Hergest Court LWS	906
Land at Breward LWS	765
Land at Millbank Wood (2) LWS	1,059
Land at Millbank Wood (1) LWS	1,773
Hergest Ridge LWS	1,466
Park Wood LWS	1,313
Hell Wood LWS	1,977
Land at Lodge Farm LWS	1,819
Land at Chickward (1) LWS	1,613
Kingswood (part) AW	1,476
Forest Wood AW	1,248
Forest Wood (part) AW	1,898
Hell Wood AW	1,977
Red Hill Wood AW	2,019*
Unnamed AW	1,361
Vallett Wood AW	962
Landlords Wood AW	611
Coal Pit Coppice AW	879
Barn Wood AW	539
Unnamed AW	905
Unnamed AW	1,181
Unnamed AW	1,026
Unnamed AW	1,010
Unnamed AW	964
Park Wood AW	1,349
Sling Wood AW	1,319

\* This site is included at >2km because the screening is based on an approximate centre point of the emissions and includes a buffer distance calculated from this centre point to the furthest point of the

boundary to ensure all nature conservation sites within the threshold distance from the Installation boundary have been included in the assessment.

This still leaves four sites which do not screen out and these are considered below. For sites within 441m of the Installation centre point, the Applicant's detailed modelling has been considered. For the detailed modelling more specific assessment criteria were used for the critical level/load. The detail of this modelling assessment is explained below.

Detailed modelling (A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Existing Turkey Rearing Houses and the Proposed Broiler Chicken Rearing Houses at Hergest Camp Farm, Lower Hergest, Kingston in Herefordshire, 25<sup>th</sup> June 2021) has determined that the PCs at the Unnamed AW (270m away), Gladestry Brook LWS (245m away) and Land near Lower Way Farm LWS (209m away) 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. There were no results shown for acid deposition, but we have estimated this from the nitrogen deposition PC divided by 14. See the results below.

Detailed modelling provided by the Applicant has been audited by our air quality modelling specialist team and we have confidence that we can agree with the report conclusions.

**Table 6 - Ammonia emissions**

Site	Critical level ammonia $\mu\text{g}/\text{m}^3$	Predicted PC $\mu\text{g}/\text{m}^3$	PC % of critical level
Unnamed AW (270m away from the centre point of the Installation and approximately 180m from the Installation boundary)	3*	0.459	15.3
Gladestry Brook LWS	3*	0.879	29.3
Land near Lower Way Farm LWS	3*	0.590	19.7

\* CLe 3 applied as no protected lichen or bryophytes species were found when checking Easimap layer – March 2023 (re-checked February 2024). In addition, CLe 3 for Gladestry Brook LWS and Land near Lower Way Farm LWS was confirmed as appropriate after consultation with Natural England, whose advice was received on 11/10/2022.

**Table 7 – Nitrogen deposition**

Site	Critical load kg N/ha/yr	Predicted PC kg N/ha/yr	PC % of critical load
Unnamed AW	10*	3.576	35.8
Gladestry Brook LWS	10*	6.848	68.5
Land near Lower Way Farm LWS	10*	4.595	45.9

\*Critical load values taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – March 2023 (re-checked February 2024). In addition, CLo 10 for Gladestry Brook LWS and Land near Lower Way Farm LWS was confirmed as appropriate after consultation with Natural England, whose advice was received on 11/10/2022.



**Table 8 – Acid deposition**

Site	Critical load keq/ha/yr	Predicted PC keq/ha/yr	PC % of critical load
Unnamed AW	1.803*	0.255	14.1
Gladestry Brook LWS	1.803*	0.489	27.1
Land near Lower Way Farm LWS	1.803*	0.328	18.2

\*CLOs taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – March 2023 (re-checked February 2024). In addition, CLO 1.803 for Gladestry Brook LWS and Land near Lower Way Farm LWS was confirmed as appropriate after consultation with Natural England, whose advice was received on 11/10/2022.

**River Arrow LWS** (nearest point is approximately 112m away from the estimated centre point of the site emissions, and approximately 20m from the Installation boundary)

The Applicant's detailed modelling has indicated that PCs at River Arrow LWS are > 100% threshold for ammonia and nitrogen deposition and therefore cannot be screened out as insignificant. There were no results shown for acid deposition, but we have estimated this from the nitrogen deposition PC divided by 14.

**Table 9 - Ammonia emissions**

Site	Critical level ammonia µg/m <sup>3</sup>	Predicted PC µg/m <sup>3</sup>	PC % of critical level
River Arrow LWS	3*	4.784	159.5

\* CLe 3 applied as no protected lichen or bryophytes species were found when checking Easimap layer – March 2023 (re-checked February 2024). In addition, CLe 3 was confirmed as appropriate after consultation with Natural England, whose advice was received on 11/10/2022.

**Table 10 – Nitrogen deposition**

Site	Critical load kg N/ha/yr	Predicted PC kg N/ha/yr	PC % of critical load
River Arrow LWS	10*	37.276	372.8

\*CLO taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – March 2023 (re-checked February 2024). In addition, CLO 10 was confirmed as appropriate after consultation with Natural England, whose advice was received on 11/10/2022.

**Table 11 – Acid deposition**

Site	Critical load keq/ha/yr	Predicted PC keq/ha/yr	PC % of critical load
River Arrow LWS	1.803*	2.66	147.5

\*CLO taken from APIS website ([www.apis.ac.uk](http://www.apis.ac.uk)) – March 2023 (re-checked February 2024). In addition, CLO 1.803 was confirmed as appropriate after consultation with Natural England, whose advice was received on 11/10/2022.

River Arrow LWS more detailed impact assessment:

For River Arrow LWS we only had limited information about why the site was designated and its current management. Therefore, the Environment Agency consulted with several

organisations including Herefordshire Biological Records Centre (HBRC), Natural England, the Herefordshire Wildlife Trust and internal conservation and ecological teams in order to determine:

- appropriate critical level and loads
- the key features for which the site was proposed as an LWS
- whether the LWS is actively managed to maintain the designated features
- conservation status of the LWS
- whether ammonia emissions and/or nitrogen deposition will affect the conservation status of the LWS
- whether the LWS is likely to be de-designated

Based upon this consultation we have determined that the site is not being actively managed and does not have any conservation objectives in place. In addition, after undertaking extensive consultation as detailed above, we have no evidence of harm for this LWS. However, due to the uncertainty in the site's status, and the limited information provided to us, we have considered it in our assessment.

The detailed modelling provided by the Applicant has been considered further by our air quality modelling team. The consultant used 13 discrete receptors to represent the River Arrow LWS. These receptors are not an accurate representation of the River Arrow LWS boundary. The receptors are positioned closer to the farm and mainly on the border of nearby wooded areas. There is likely to be a large drop-off in concentration between the consultant's chosen locations and the banks of the River Arrow LWS designation. We have placed 23 discrete receptors along the boundary of the River Arrow LWS.

**For the proposed scenario, our additional check modelling at the River Arrow LWS indicates:**

- Our stage 1 (without depletion) and stage 2 (with depletion) ammonia predictions are generally higher than the Applicant's at their 13 receptor locations, therefore our check modelling is more conservative overall.
- Ammonia PCs - the maximum process contribution (PC) along our chosen 23 revised sensitive receptors is significantly lower than the maximum from the Applicant's receptors, approximately 50% lower and does not exceed 100% of the critical level of 3 µg/m<sup>3</sup>.
- Nutrient nitrogen deposition PCs – the Applicant assumed an ammonia dry deposition velocity of 0.03 m/s for woodland features to calculate nutrient nitrogen deposition on the River Arrow LWS. Assuming a woodland dry deposition velocity is the worst-case assumption. The Environment Agency have calculated deposition assuming freshwater, grassland/moorland, and woodland/forest ecological features to accommodate all the possible features from the citation extract which we consider is more representative:
  - Freshwater features – at our receptors along the LWS, freshwater nitrogen deposition PCs are up to 100% of a critical load of 10 kg N/ha/yr.
  - Grassland/moorland features – at our receptors along the LWS grassland nitrogen deposition PCs are up to 150% of a critical load of 10 kg N/ha/yr.
  - Woodland/forest features – at our receptors along the LWS woodland nitrogen deposition PCs are up to 225% of a critical load of 10 kg N/ha/yr.
- Acid deposition PCs – Based on the worst-case assumption of using the nutrient nitrogen deposition for woodland in determining acid deposition, it is possible to

determine the process contribution, and this has been calculated as PCs up to 89% of an acid critical load of 1.803 keq/ha/yr.

**As well as the proposed scenario we have also considered the existing unpermitted turkey scenario and our additional check modelling at the River Arrow LWS indicates:**

- Ammonia PCs - at our receptors along the LWS the PCs are up to 170% of the ammonia critical level of 3 µg/m<sup>3</sup>.
- Nutrient nitrogen deposition PCs:
  - Freshwater features – at our receptors along the LWS, freshwater deposition PCs are up to 170% of a nutrient nitrogen critical load of 10 kgN/ha/yr.
  - Grassland/moorland features – at our receptors along the LWS, grassland deposition PCs are up to 265% of a nutrient nitrogen critical load of 10 kgN/ha/yr.
  - Woodland/forest features – at our receptors along the LWS, woodland deposition PCs are up to 400% of a nutrient nitrogen critical load of 10 kgN/ha/yr.
- Acid deposition PCs – based on the worst-case assumption of using the nutrient nitrogen deposition for woodland in determining acid deposition, it is possible to determine the process contribution, and this has been calculated as PCs up to 158% of an acid critical load of 1.803 keq/ha/yr.

In addition, consideration has been given to the extent of the impacts on the River Arrow LWS in our check modelling with the 23 receptors located at the boundary of the LWS. The River Arrow LWS designation covers a straight-line distance of approximately 27 km with an area of around 0.52 km<sup>2</sup>.

- For the proposed scenario, we estimate the worst-case area of exceedance for nitrogen deposition using woodland deposition PCs is likely to be approximately 0.7% of the total area of the River Arrow LWS.
- For the existing scenario, we estimate the worst-case area of exceedance for nitrogen deposition using woodland deposition PCs is likely to be approximately 2% of the total area of the River Arrow LWS.
- Under worst-case woodland deposition, the proposed scenario could lead to a 65% reduction in the area of exceedance compared to the existing scenario.

The following is a summary of our more detailed modelling assessment for River Arrow LWS:

- The PCs are not predicted to exceed 100% of the critical level of 3 µg/m<sup>3</sup> for ammonia.
- The PCs are not predicted to exceed 100% of the acid critical load of 1.803keq/ha/yr.
- The PCs are not predicted to exceed 100% of the nutrient nitrogen critical load of 10 kg N/ha/yr for freshwater features.
- Even if the worst case is assumed and the woodland deposition at this location is appropriate, a negligible proportion of the site (approximately 0.7% of the total habitat) exceeds 100% of a critical load of 10 kg N/ha/yr.
- Our assessment shows there is a reduction of more than 40% in process contributions of ammonia, acid and nitrogen deposition from the proposed broiler farm scenario when compared to the existing turkey farm (which does not require a permit) across all habitat features. There is no exceedance of the 100% threshold for ammonia and acid deposition as a result of the proposed scenario.

## **Conclusion**

Overall, our more detailed modelling review outlined above concludes that the process contributions of ammonia and acid are below 100% of the relevant critical level (CLE) or critical load (CLO). With regards to nitrogen deposition, for the majority of the area (99.3%) even for the worst-case woodland deposition, the process contribution is below 100% of the critical load, except for a negligible 0.7% of the total habitat.

The current situation on the farm is that turkeys are continuing to be stocked and it has been an operational farm for a significant period of time – turkey placement data has been provided as far back as 2015. This confirms that there have been turkeys placed at the site for a number of years, and that, coupled with their current continuing presence, confirms that taking into account the current operations is a realistic baseline scenario.

Furthermore, the Operator has the potential to stock up to 40,000 turkeys at any time, without requiring an environmental permit.

In summary, we conclude that there will be no significant pollution at any LWS and that the proposed broiler activity will have less of an impact than the existing operations which do not require a permit.

## **4.2 Ammonia Emissions – Human Receptors**

The Health Protection Agency (now UK Health Security Agency) has stated (Position Statement, Intensive Farming 2006) that it is unlikely that ammonia emissions from a well-run and regulated farm would be sufficient to cause ill health.

Whilst the potential adverse effects of ammonia include respiratory irritation and may also give rise to odour complaints, levels of ammonia in ambient air will decrease rapidly with distance from a source.

The Applicant's measures to minimise emissions from the Installation, which will minimise ammonia emissions, are included in the Environmental Risk Assessment, Odour Management Plan and Dust Management Plan. We have assessed these measures and have determined they represent best available techniques for this activity. Measures include operating ventilation systems to achieve optimum humidity levels for the stage of production in all weather and seasonal conditions. Furthermore, condition 3.2 of the Permit applies to substances not controlled by emissions limits, also known as fugitive emissions. The Operator will be required to manage its activities so that they do not cause pollution.

In addition, we have considered ammonia levels for human health.

There are two human health Environmental Assessment Levels (EALs) for ammonia as outlined in our web guidance: <https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit#environmental-standards-for-air-emissions>. These are a long term (LT) EAL of 180µg/m<sup>3</sup> and a short term (ST) EAL of 2500µg/m<sup>3</sup>.

The Applicant did not submit a quantitative assessment of the potential impact on human health from ammonia. However, the Environment Agency has carried out an assessment using conservative assumptions with regards to ammonia. The Environment Agency conclude that it is highly unlikely that the annual or 1 hour ammonia environmental standard of 180 µg/m<sup>3</sup> and 2500 µg/m<sup>3</sup> respectively, for human health, would be exceeded at the nearby residential housing estate to the northeast or industrial estate to the east of the site.

We have carefully assessed the impacts and taken advice from UK Health Security Agency (UKHSA), who are the authority in matters relating to public health. The consultation response from UKHSA can be found within Annex 1 of this document.

We conclude that ammonia from the Installation is unlikely to have a significant health impact on human receptors, given the conditions imposed by the Permit.

## 4.3 Odour

### 4.3.1 Risk Assessment

Intensive farming is by its nature a potentially odorous activity and complaints concerning this type of site are not unknown. This is recognised in our 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 guidance ([www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/297084/geho0110brsb-e-e.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/297084/geho0110brsb-e-e.pdf)), which acknowledges that there is likely to be odour outside of the Installation boundary, and that the appropriate measures for this sector prevent and where that is not possible minimise these odour emissions.

The Environment Agency's overarching approach for all installations is to ensure adequate controls are in place for sites with the potential to cause odour pollution beyond the Installation boundary. This is achieved via the requirement for the operator to have and comply with an approved odour management plan (OMP). This OMP must be approved by the Environment Agency in line with odour condition 3.3 (see below). Such an OMP covers both point source and fugitive potential odorous emissions from an installation and is based on the foundation of a bespoke risk assessment for each particular installation as discussed below.

Condition 3.3 of the 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 OMP must be approved as part of the permitting process if sensitive receptors (in this instance excluding properties associated with the Installation) 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. In this instance there are more than 50 sensitive receptors (a mixture of residential and commercial properties) within 400 metres of the Installation boundary, therefore an OMP has been submitted, and further details are provided in section 4.3.2 below.

The Applicant's H1 risk assessment for odour provided with the Application lists key potential risks and likelihood of odour pollution beyond the Installation boundary, along with the measures taken to manage the risk. The activities, or foreseeable problems with activities, that have been identified as having the potential to generate odour are as follows:

- the selection and manufacture of feed
- feed delivery and storage
- problems with ventilation systems (inadequate air movement leading to high humidity and wet litter)
- poor litter management (including wet litter, insufficient or poor-quality litter, drinking systems spillage and disease outbreak leading to wet litter)
- carcass disposal (inadequate storage or disposal of carcasses); and
- house clean out operations

### 4.3.2 Odour Management Plan

The Installation is located within 400m from the Installation boundary of a range of both residential and commercial receptors. These have been detailed in the Odour Management Plan provided, and on an associated receptor map.

The Operator has provided a revised OMP (submitted 28/06/2023). This revised OMP 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', our Top Tips Guidance and the 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. Details of odour control measures, contingency measures and complaint procedures are 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 for:

- manufacture and selection of compound feed
- feed delivery and storage
- ventilation techniques
- litter conditions and management
- carcass disposal and storage
- poultry house clean out (litter removal)
- wash down and disinfection
- fugitive emissions (including leakage from feed bins, fuel and chemical storage);
- dirty water management
- abnormal operations
- waste production/storage; and
- materials storage

The OMP includes a section on monitoring. Odour levels at the Installation will be monitored daily to detect elevated levels of odour, via twice daily olfactory checks coinciding with stock inspections. Formal odour monitoring will be conducted weekly by persons not involved directly with the broiler production, at the Installation boundary. The OMP also includes monitoring for offsite odour, in response to any assessment by the Operator and/or as a result of complaints. In the event that elevated levels of odour are recorded, the site staff will be alerted to implement contingency measures. Retesting at the monitoring points will be conducted following any actions implemented to ensure the effectiveness of the actions.

The OMP includes contingency measures (although it should be noted that there are a range of primary measures in place to prevent, or where this is not possible, minimise, odour pollution in the first instance) to minimise odour pollution during abnormal operations such as disease outbreak or extreme weather conditions preventing normal actions being undertaken. A list of primary and secondary remedial measures is included in the contingency plan, including triggers for commencing and ceasing use of these measures and time frames for putting measures in place. These include the following measures:

- Rapid bird growth or poor growth due to illness – veterinarian advice is sought immediately for bird illness with additional bedding added to prevent/minimise odour release.
- Carcass storage failure/damage – the site will have the facility to move carcasses from a faulty freezer to an operational freezer with the broken freezer to be repaired or replaced within 72 hours.
- Fan/ventilation system failure – An alternative ventilation fan is to be used, with an electrician called out within one hour.
- Wet litter – additional bedding applied to ensure dry friable litter within two hours with further measures of additional ventilation and heating is implemented to also dry litter.

- Bird depletion/thinning – a minimum ventilation rate will be implemented to prevent fugitive release of odour within one hour if monitoring detects fugitive odour emissions.
- Delay in wash water removal – washing operations are suspended with additional land under operator control for dirty water removal should that be required, and licensed waste disposal contractor is utilised.
- Pipe or feed bin failure causing leak – repair to pipe work or feed bin is undertaken with immediate effect. Inspections will be carried out on a daily basis. Additional bins can be utilised, and spills are cleaned up immediately. Any bin or pipework, which requires replacement will be done within ten working days.
- Leaky drinker systems/water pipe failure – any leaks are isolated and repaired immediately. Wet areas are covered with additional bedding to minimise odour.

The OMP also provides a suitable procedure in the event that complaints are made to the Operator and includes a complaints form template. The OMP is required to be reviewed at least every 4 years and/or after the Environment Agency has notified the Operator that it has substantiated a complaint received. The OMP commits the Operator to review the OMP every year from permit issue date, prior to any major changes to operations or following any complaint. Any changes to the OMP are to be documented and dated and the Environment Agency notified.

Within the OMP, to prevent and minimise odour emissions beyond the Installation boundary, the Operator has also committed to construct a purpose-built storage facility to house freezers to hold fallen stock and to plant an evergreen screen hedge (a stated BAT technique within the BAT conclusions) at the northern end of the site. Furthermore, they are also installing a heat exchanger on one of the poultry houses and carrying out monitoring to show its effectiveness in reducing odour emissions from the site.

Although we consider that the OMP complies with the relevant guidance and will prevent, and where that is not practicable, minimise the emission of odour, we have, as an additional layer of protection, included a pre-operational condition PO1 and improvement condition IC1 (further information can be found in section 4.9). The pre-operational condition requires the Operator to install a heat exchanger on one poultry house and to submit proposals to monitor the impact on odour emissions from the poultry house.

The improvement condition IC1 requires the Operator to provide a report to the Environment Agency for approval, detailing the results of that monitoring and the subsequent requirements within IC1 are for an analysis of whether further odour control measures are required at the Installation and their subsequent implementation.

The Environment Agency has reviewed the OMP and considers it complies with the requirements 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 (version 2), Appendix 4 guidance 'Odour Management at Intensive Livestock Installations', our Top Tips Guidance and the Poultry Industry Good Practice Checklist (August 2013). 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.

The Operator's compliance with the Permit and its OMP will prevent, and where that is not practicable, minimise the emission of odour. It is not considered that there will be any significant odour pollution at sensitive receptors beyond the Installation boundary.

### **4.3.3 Conclusion**

We have included our standard odour condition 3.3.1 in the Permit, which requires that 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 (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 odour.

The Applicant will be required to operate the Installation in line with the operating techniques set out in the Application supporting documents (as listed in permit table S1.2), and the OMP. Once the operation of the Installation commences, there is a requirement to review and record (as soon as practicable after a substantiated complaint) whether changes to the OMP should be made and make any appropriate changes to the OMP identified by the review.

The improvement condition IC1 gives the Environment Agency the means and control to require the Operator to implement further measures as required, linked to [the](#) review of [the](#) first 12 months operation of the Installation.

We are satisfied that the manner in which operations are carried out on the Installation will not cause odour pollution, although we have sufficient controls within the permit conditions to enable further measures to be implemented should these be required.

## 4.4 Noise

### 4.4.1 Risk Assessment

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.

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.*

The Applicant's H1 risk assessment for noise and vibration provided with the Application lists the following key potential noise sources and the measures taken to manage the risk from them:

- large vehicles travelling to and from the site
- large vehicles on site for delivery of feed or transporting birds
- removal of litter and wastewater
- small vehicles travelling to and from site
- feed transfer from lorry to storage
- operation of ventilation systems (fans)
- alarm system and standby generator
- chickens
- personnel
- building work and repairs

In all cases the Applicant assessed the likelihood of noise pollution beyond the Installation boundary as unlikely and the overall risk as not significant.

Under section 3.4 our 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 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.

There are sensitive receptors within 400 metres of the Installation boundary. Therefore, the Operator has provided a noise management plan (NMP) as part of the Application supporting documentation, and further details are provided in section 4.4.2 below.



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 the manner in which operations are carried out on the Installation will prevent, and where that is not practicable minimise noise emissions, that there will be no significant noise pollution and that we have sufficient controls within the permit conditions to enable further measures to be implemented should these be required.

#### **4.4.2 Noise Management Plan**

An NMP should contain appropriate measures to prevent, or where that is not practicable to minimise the risk of pollution from noise emissions. Noise pollution from the Installation is one of the concerns for members of the public who have raised objections to this proposal.

Operations with the most potential to cause noise nuisance have been assessed and control measures put in place, as described in the revised NMP (received 07/02/23), for all the activities with greatest potential to generate noise, including:

- ventilation fans
- feed deliveries
- feeding systems
- fuel deliveries
- vehicle movements
- alarm systems
- bird catching during thinning and final depletion
- clean out operations
- maintenance/repair activities
- set up/placement of birds; and
- standby generator

Please note: the Applicant has only considered vehicle movements accessing the site and within the Installation boundary, as we can only regulate noise within the Installation boundary. Noise emitted from vehicles travelling on the local road network is outside our remit.

The NMP includes a section on monitoring with noise levels at the Installation being assessed daily. Although we consider that the NMP complies with the relevant guidance and will prevent, and where that is not practicable, minimise the emission of noise, we have as an additional layer of protection, included an improvement condition (IC2) to review whether this is the case and in the unlikely event it is not then further measures will be required (further information can be found in section 4.9). After 12 months of operation, or earlier if requested by the Environment Agency, a report will be submitted identifying any substantiated complaints. In the event of substantiated complaints, the Operator will initiate a Noise Monitoring Survey according to the noise monitoring protocol submitted with this application. The results of this survey will inform whether any additional noise control measures are required.

The NMP also contains a commitment to the recording and investigation of any noise complaints received in direct relation to the Installation. Complaints received directly from the public will be notified to the Environment Agency.

The NMP will be reviewed at least every year and/or after an Environment Agency substantiated complaint is received.

#### **4.4.3 Conclusions**

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.

The Operator will be required to operate the Installation in line with the operating techniques set out in the Application supporting documents and the NMP. Once the operation of the Installation commences, there is a requirement to review the NMP either following an Environment Agency substantiated complaint, or every year, whichever is sooner. The review will record whether changes to the NMP should be made and make any appropriate changes to the NMP identified by the review.

We are satisfied that the manner in which operations are carried out on the Installation will not cause noise pollution, although we have sufficient controls within the permit conditions to enable further measures to be implemented should these be required.

## 4.5 Dust and Bioaerosols

The use of Best Available Techniques and good practice will ensure minimisation of emissions. There are measures included within the Permit (the 'Fugitive Emissions' conditions) to require their use. Condition 3.2.1 'Emissions of substances not controlled by an emission limit' is included in the Permit to prevent such emissions causing pollution. 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 approved in writing with the Environment Agency.

In addition, conditions 1.1.1 and 2.3.1 within the Permit provide additional protection. Condition 1.1.1 is a general management condition stating that 'the operator shall manage and operate the activities in accordance with a written management system that identifies and minimises risks of pollution, so far as is reasonably practicable, including those risks arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and using sufficient competent persons and resources'. Condition 2.3.1 'Operating Techniques' states that 'activities shall, subject to the conditions of the permit, be operated using the techniques and in a manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing...', and this ties the Operator to the specific details submitted in support of the Application.

The sensitive receptors considered for bioaerosols include the Operator's farmhouse (unlike with odour and noise assessments which relate to amenity issues) as well as third-party receptors beyond the Installation boundary. The nearest receptor is the Operator's residence located approximately 24m to the south of the Installation boundary and approximately 43m from the nearest poultry house. Other receptors within 100m from the Installation boundary include 12 industrial units located to the east of the Installation boundary at approximate distances of 18m, 25m, 28m (which is a collection of industrial units all within one building), 30m, 42m, 60m, 61m, and 95m.

Guidance on our website concludes that applicants need to produce and submit a dust and bioaerosol management plan with their applications only if there are relevant receptors within 100 metres of their farm. 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](http://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 boundary, the Applicant was required to submit a dust and bioaerosol management plan in the designated format, referred to as the

Dust Management Plan (reference 'Dust Management Plan, Hergest Camp Farm Poultry Unit', dated March 2023).

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 confirmed the following measures in their dust management plan to reduce dust, which will inherently reduce bioaerosols:

- No milling or mixing of feed takes place at the farm.
- Feed delivery systems are sealed.
- Use of oil coated, pelleted feed to bind dusty ingredients.
- Ventilation systems are designed and operated to achieve optimum internal environmental conditions, and fans run at greater rates to enable better dispersion of air and dust.
- Bedding is dust extracted virgin wood shavings which is quality checked and either blown into the houses in enclosed pipes or wrapped and unpacked within the houses.
- Exhaust vents are washed under low pressure during cleaning process to minimise both release of dust to atmosphere and escape of contaminated water; and
- Any feed spills cleared up immediately.

With regards to particulate matter, our approach to dust and bioaerosol environmental control (to require a dust and bioaerosol management plan for intensive farming installations with receptors within 100 metres of the Installation boundary) will reduce total overall dust levels which will subsequently reduce PM10 and PM2.5 particle size dust, with most of the measures focusing on reducing creation of dust at source. This is an agreed approach with former Public Health England (now UKHSA) and ourselves.

We are satisfied that the measures outlined in the dust management plan and Application will prevent, and where that is not practicable minimise, dust and bioaerosol emissions from the Installation and prevent significant pollution or harm to human health. We are also satisfied that we have sufficient controls within the permit conditions to enable further measures to be implemented should these be required.

## 4.6 Site Drainage

### 4.6.1 Description and risk assessment

An assessment of the site drainage, including the risk to groundwater and surface water from potential pollutants from the Installation, has been undertaken.

The Operator is required to comply with its management system by condition 1.1.1 of the Permit. Further, it is required to comply with measures as detailed in section 3.2, EPR 6.09 'How to comply with your environmental permit for intensive farming', version 2 (January 2010) and specifically the section entitled 'Appropriate measures for preventing and minimising fugitive emissions, management of drainage systems and run-off'.

This states:

*'roof water from systems with high efflux velocity roof fans (i.e. above 5m s<sup>-1</sup>) does not require interception and treatment provided roofs remain clean with no visible signs of dust.'*

We consider roof water from the poultry houses to be clean provided roofs remain clean with no visible signs of dust, where the ventilation is by means of high velocity roof extraction fans at a height at or greater than 5.5m, with an efflux velocity of at least 7 m/s. The Applicant has

confirmed the ventilation to be high velocity fans at a height of 5.5m and efflux velocity 7 m/s. In addition, the measures proposed by the Applicant in its management systems include regular building inspections, site maintenance and procedures to keep the buildings clean and prevent the build-up of dust on site, and visual checks made for leakage, corrosion and structural damage.

Roof water from all six houses and yard water drains to either French drains (acting as soakaways) or stone filled or grass soakaways via a combination of gutters, downpipes, and clean water drains (precise details can be found in section 3.3 above). Some drainage is also discharged to the River Arrow, via settlement pits and sediment traps. Soakaways and sediment traps/pits are considered to be sufficient interception and treatment for potentially lightly contaminated water (as stated in EPR6.09 'How to comply with your environmental permit for intensive farming') - although in this instance the roof water is considered clean, as described above, and only clean yard water is discharged to soakaways and to the River Arrow (via 3 settlement pits and traps – these allow any sediments, which may be present, to separate out prior to discharge). The outfall to the River Arrow can be found at the following grid reference: NGR SO 27553 54792. When the yard is contaminated (e.g. during catching, mucking out or washing), water from the yard drains to underground dirty water tanks and is not discharged.

The Permit will ensure (for example via the management condition 1.1 and the operating techniques condition 2.3) that the Operator keeps these areas clean to minimise potential pollution.

During clean out of the poultry houses where the concreted yard may become contaminated, diverter valves are manually operated to switch the drainage from the yard area to channel it to one of two underground dirty water collection tanks to ensure no polluted water enters the clean water drainage system. The collection tank will be built to conform to specifications in EPR6.09 'How to comply with your environmental permit for intensive farming', and specifically to meet the requirements of The Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010 (as amended 2013). All wash water inside the poultry houses goes straight into the dirty water drainage system and on to the dirty water collection tanks. The dirty water is exported off site, immediately following washing operations, for spreading on Operator owned land in accordance with a Manure Management Plan and appropriate NVZ spreading regulations.

Other sources of potential pollution from fugitive emissions have been assessed, such as dust from feed silos and transfer of feed to silos on delivery. Measures to prevent or minimise emissions are considered to be satisfactory. Potential pollutants such as chemicals stored on site, fuel storage and carcass storage have sufficient measures in place for containment, as assessed against the requirements of S3.2 of EPR 6.09 'How to Comply with your environmental permit for intensive farming', version 2. With the exception of the fuel tank for the standby generator (which is bunded), no fuel is stored on site. Purpose-made footbaths with lids provided will be managed so as to prevent overflow and sited on impermeable surfaces on the concrete aprons and at the personnel entrance to the building. Spent disinfectants from the footbaths will be disposed of with the dirty water. Vehicle washing is at a designated wash point, with washings directed to dirty water tanks. Areas around buildings will be kept free from build-up of manure and spilt feed.

Permit condition 3.1.1 states that the only point source emissions to water or land should be from the sources and emissions specified in table S3.2. In addition, permit conditions 3.2.1 and 3.2.2 state the following:

*3.2.1 Emissions of substances not controlled by emission limits shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.*

*3.2.2 The operator shall:*

- (a) *if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits; and*
- (b) *implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.*

The measures in place in the Operator's management systems are considered sufficient to ensure that any contaminated water will be contained, and potentially lightly contaminated water has sufficient mitigation in place. The Permit requires that the Operator complies with its written management system at all times. Consequently, we are satisfied that no pollution of groundwater or surface water from buildings and yards should occur as a result of operations at the Installation.

#### **4.6.2 Conclusion**

We conclude that the information provided with the Application (detailed in section 4.6.1 above) indicates that the potential risk to ground waters and surface waters from the Installation is not significant. The only discharge to surface water is of uncontaminated roof and yard water; any contaminated yard water and wash water is diverted to dirty water tanks. We are satisfied that the site complies with best practice and that no pollution of ground waters or surface waters should occur as a result of operations at the Installation. We are satisfied that the measures in place are BAT, the manner in which operations are carried out at the Installation will result in no significant pollution and that we have sufficient controls within the permit conditions to enable further measures to be implemented should these be required.

#### **4.7 Pests**

The Applicant's proposed measures to prevent or minimise the presence of pests on site are as follows:

- Pest control undertaken by trained company staff.
- Good management of the Installation.
- Areas will be kept clean.
- Vermin proof feed silos.
- Measures are in place to reduce dust and risk of spillages, such as manure and feed.
- Feed spillages are cleared up promptly.
- Litter is removed from houses at the end of the cycle and exported from the installation; no litter is stored on site.
- Carcasses are collected daily and stored in freezers on site prior to their removal by a licensed collection agent.

Condition 3.6 of the Permit also ensures that pests are adequately dealt with at the Installation. It reads as follows:

3.6.1 *The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.*

3.6.2 *The operator shall:*

- (a) *if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution, hazard or annoyance from pests;*

- (b) *implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.*

As we consider the presence of pests at the Installation to be a low risk the Applicant was not required to submit a pest management plan with the Application. We are satisfied that the measures outlined by the Applicant will be sufficient to prevent or minimise the presence of pests from the installation and that we have sufficient controls within the permit conditions to enable further measures to be implemented should these be required.

## 4.8 Intensive Rearing of Poultry or Pigs BAT Conclusions document

The Best Available Techniques Reference Document (BREF) for the Intensive Rearing of Poultry or Pigs (IRPP) was published on 21 February 2017. There is now a separate BAT Conclusions document which sets out the standards that permitted farms have to meet.

The BAT Conclusions document is available via the following link:

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D0302&from=EN>

Now that BAT Conclusions are published for IRPP, all new installation farming permits covered by IED issued after the 21 February 2017 must be compliant in full from the first day of operation.

The conclusions include BAT Associated Emission Levels (AELs) for ammonia emissions which will apply to the majority of permits, as well as BAT AELs for nitrogen and phosphorus excretion.

### 4.8.1 BAT Conclusions review

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

Table 10 below sets out a more specific review of the measures the Applicant has applied to ensure compliance with the key BAT Conclusions:

<b>Table 10 Measures to ensure compliance with BAT Conclusions</b>	
<b>BAT measure</b>	<b>Applicant compliance measure</b>
BAT 3 Nutritional management - Nitrogen excretion	The Operator has confirmed they will demonstrate that the regulated facility achieves levels of nitrogen excretion below the required BAT-AEL of 0.6 kg N/animal place/year by an estimation using manure analysis for total nitrogen content. Conditions 3.5.1 and 4.2.3 of the Permit require the Operator to undertake annual monitoring and reporting for nitrogen excretion as specified in Tables S3.3 and S4.1.
BAT 4 Nutritional management - Phosphorus excretion	The Operator has confirmed they will demonstrate that the regulated facility achieves levels of phosphorus excretion below the required BAT-AEL of 0.25 kg P <sub>2</sub> O <sub>5</sub> /animal place/year by an estimation using manure analysis for total phosphorus content. Conditions 3.5.1 and 4.2.3 of the Permit require the Operator to undertake annual monitoring and reporting for phosphorus excretion as specified in Tables S3.3 and S4.1.

<b>Table 10 Measures to ensure compliance with BAT Conclusions</b>	
<b>BAT measure</b>	<b>Applicant compliance measure</b>
BAT 24 Monitoring of emissions and process parameters - Total nitrogen and phosphorus excretion	Table S3.3 of the Permit concerning 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: <ul style="list-style-type: none"> <li>• Twice daily checks to detect abnormally high housekeeping odours.</li> <li>• Formal odour monitoring will be conducted weekly by persons not directly involved with the broiler production.</li> <li>• The OMP also includes monitoring for offsite odour, in response to any assessment by the Operator and/or as a result of complaints. In the event that elevated levels of odour are recorded, the site staff will be alerted to implement contingency measures. Retesting at the monitoring points will be conducted following any actions implemented to ensure the effectiveness of the actions.</li> </ul>
BAT 27 Monitoring of emissions and process parameters - Dust emissions	Table S3.3 of the Permit on process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.  The Operator will report the dust emissions to the Environment Agency annually by calculation using the standard dust emissions factor for broilers.
BAT 32 Ammonia emissions from poultry houses - Broilers	The BAT-AEL to be complied with is 0.08 kg NH <sub>3</sub> /animal place/year.  The Operator will meet this as the emission factor for broilers is 0.034 kg NH <sub>3</sub> /animal place/year.  The Installation does not include an air abatement treatment facility therefore the lower BAT AEL does not apply, and the standard emission factor already complies with the applicable upper BAT-AEL.

## 4.9 Pre-operational conditions and improvement programme

Based on the information in the application, we consider that we need to impose one pre-operational condition.

### Pre-operational measure 1:

The Operator shall submit a written report and obtain the Environment Agency's written approval to it, which includes the specification of the heat exchanger to be installed at one

poultry house, and details of the odour monitoring programme which is to commence as soon as the Installation is operational. The heat exchanger shall be installed in accordance with the Environment Agency's written approval.

The report shall also include, but not be limited to:

- Details of a monitoring plan which will compare odour emissions in terms of measuring odour units from the poultry house with the heat exchanger installed, with measurements taken before and after the heat exchanger.
- Confirmation that the odour monitoring will meet MCERTS standard 13725 for measurement of odour in terms of odour units with specific reference to ventilation design, allowing sampling to be taken in line with the standard.
- Any revised documents required in support of the permit such as, but not limited to, site layout and drainage plans indicating the location of the heat exchanger and revised technical standards.
- Any other relevant standards used for the monitoring, and sampling and analysis methodologies used to obtain the data.
- A monitoring programme timeline to cover confirmation of installation of monitoring equipment and a minimum of 12 months of monitoring as soon as operations commence with broiler chickens in the poultry house with the heat exchanger installed.
- Confirmation of the date of installation of the heat exchanger.

Based on the information in the application, we consider that we need to impose two improvement programmes as follows:

**Improvement condition 1:**

- a) The Operator shall carry out the monitoring in accordance with the proposals approved under pre-operational measure 1 in Table S1.4. The Operator shall undertake a review of the odour monitoring results at the Installation and provide a written report to the Environment Agency for approval detailing the results of the monitoring within 1 calendar month of the completion of the monitoring.
- b) The Operator shall undertake and submit a written review to the Environment Agency for approval of the Odour Management Plan (OMP) for the Installation covering, but not limited, to the following areas:
  - A review of any substantiated odour complaints related to the Installation within the same 12 months as odour monitoring report required in part IC1 (a) of this programme.
  - Monitoring conclusions from report in IC1(a).
  - A review of the effectiveness of the existing odour control measures within the OMP.
  - An assessment of whether any additional mitigation measures are appropriate.
- c) Where the review under IC1 (b) concludes a revised OMP is appropriate, the Operator shall then submit to the Environment Agency, for approval, an updated OMP and include within the OMP any additional appropriate measures proposed including timescales for their implementation. The measures may include but not be limited to, the installation of additional heat exchangers, or the installation of air scrubber abatement, in light of the report produced in IC1(a).



### **Improvement condition 2:**

- a) After the Installation has been operational for 12 months, or sooner if requested in writing by the Environment Agency, the Operator shall undertake a review of the Noise Management Plan (NMP) for the Installation and provide a written report to the Environment Agency for approval covering, but not limited to, the following areas:
- A review of any substantiated noise complaints related to the Installation.
  - A review of the effectiveness of the existing noise control measures within the NMP.
  - An assessment of whether any additional mitigation measures are appropriate.

If requested by the EA, the review shall include a comprehensive noise assessment report, undertaken by an experienced and suitably qualified person, in accordance with the procedures given in BS4142:2014 + A1:2019 (Methods for rating and assessing industrial and commercial sound). The Operator shall follow the protocol (titled 'Hergest Camp Farm – Noise Monitoring Protocol 3<sup>rd</sup> February 2023') submitted with the application, or an alternative protocol, as agreed in writing by the Environment Agency. The assessment shall include the identification and assessment of the impact of noise emissions upon surrounding sensitive receptors arising from site.

- b) Where the review under IC2 (a) concludes a revised NMP is appropriate, the Operator shall then submit to the Environment Agency, for approval, within 1 calendar month of the completion of the above review, an updated NMP (having regard to IC2(a) and include within the NMP any additional appropriate measures proposed, including for the further attenuation and/or management of noise and shall include timescales for their implementation.

## **4.10 Spreading of manure and wash water to agricultural land**

Consideration of land spreading of organic manure (such as poultry manure) and/or poultry wash water (which is also known as dirty water and is a type of slurry) outside of the Installation boundary is detailed below. There will not be any spreading of such materials within the Installation boundary.

The surrounding land where manure/slurry may be stored or spread is not part of the Installation. The Environmental Permitting Regulations (EPR) is about preventing significant pollution from emissions from the Installation. Emissions are substances released from the Installation whilst something exported in a controlled manner for subsequent use elsewhere is not considered an emission.

The Applicant has proposed the following measures in the handling of their manure and poultry wash water:

- All litter is sold to a third party with none being spread either within the Installation boundary or on operator owned land.
- Any litter that is exported from the Installation has records kept of the quantities, destination and the date of transfer to separate farming businesses.
- Assurance is received from recipients that spreading is in accordance with the Code of Good Agricultural Practice or in accordance with the manure management plan for the receiving land.
- The third-party agent collecting the litter has multiple outlets/customers.
- The Applicant has confirmed that there will be no storage or spreading of poultry manure or slurry within the Installation boundary at any time.

- Wash water (slurry) is spread on land owned by the Operator (but outside of the Installation boundary) in accordance with a manure management plan and NVZ Regulations (The Nitrate Pollution Prevention Regulations 2015, which were further amended in 2016).

The use of pig or poultry slurries and manures on land in England is regulated through The Reduction and Prevention of Agricultural Diffuse Pollution (England) Regulations 2018 (commonly known as the Farming Rules for Water) <https://www.gov.uk/government/publications/farming-rules-for-water-in-england> and, in designated areas, The Nitrate Pollution Prevention Regulations 2015, which were further amended in 2016 (NVZ Regs. for short). Both regulations seek to prevent pollution through restricting when, where and how much manure or slurry can be applied. Farming Rules for Water require good farming practice, so that farmers manage their land both to avoid water pollution (from run-off) and to benefit their business. Nitrate Vulnerable Zones (NVZs) are areas designated as being at risk from agricultural nitrate pollution.

In NVZs, operators must comply with the rules that restrict the quantity of livestock manure and organic manures that can be applied, the times of the year when certain types may not be applied and set minimum storage requirements for some livestock manures.

The NVZ Regs Part 3 regulation 7(1) states, in a nitrate vulnerable zone, 'The occupier of a holding must ensure that in any twelve-month period, the total amount of nitrogen in organic manure spread on any given hectare of land on the holding does not exceed 250kg'.

Where organic manures (including poultry manure and wash water) are applied to land owned and managed by the Operator, it also, in addition to the above referenced legislation, must be spread in accordance with a manure management plan (this is in accordance with EPR 6.09 Sector Guidance Note – How to Comply with your environmental permit for intensive farming (EPR 6.09) (version 2)) and condition 2.3.5 of the Permit, which requires that all appropriate measures are used to prevent, or where that is not practicable, minimise pollution from the disposal or recovery of manure or slurry. Wash water will be applied to land owned by the Operator so a manure management plan will be required. This should include the need to undertake analysis of the manure/slurry, undertake nutrient analysis of the receiving soil and keep appropriate records e.g. what was spread, application date, application rates, and that total nitrogen supplied doesn't exceed 250kg/ha on any field in any 12-month period. The adequacy of the plan will be examined during compliance visits of the Installation. This will ensure that appropriate measures will be in place for any spreading on land owned and managed by the Operator. This is underpinned by requirements set out in, for example, EPR 6.09 Sector Guidance Note – How to comply with your environmental permit for intensive farming (EPR 6.09) (version 2) and Farming Rules for Water.

A manure management plan would normally comprise a risk map of the land to be spread on, with areas of different risks for spreading identified, usually in colours. By considering slope, soil type and the position of surface waters and water supplies, it is possible to identify fields or parts of fields where livestock manures and dirty water should never be spread. It is also expected that such plans identify where livestock manures and dirty water should not be spread under certain conditions or where application rates should be restricted. Furthermore, on the map any areas in Nitrate Vulnerable Zones affected by the closed (non-spreading) periods should be marked. The plan may also contain commitments to handle farm waste in different ways. For example, liquid waste to be injected into the soil to increase the nutrient efficiency or solid poultry manure to be surface applied and soil incorporated within 24 hours to increase availability of nutrients and to manage the risk of odour complaints etc.

How to Comply states that if organic manure is exported off-site for spreading (which is the case here for poultry manure), written evidence of the arrangements in place must be maintained such as:

- records of the quantities and the date of transfer, for example, to power station or biogas plant for recovery, wastewater treatment plant for disposal, or third party for spreading to land;
- the names and addresses and land acreage available where manures and slurries are exported for spreading to land.

Where a 'manure agent' or other third party accepts liability for removing organic manure from the Installation (as is the case here for the poultry manure generated by the site), the Operator should obtain acceptable confirmation as to its ultimate application to land such as:

- the third party will ensure that the organic manure is spread to land in accordance with the Code of Good Agricultural Practice (CoGAP); or
- that the spreading will be in accordance with a manure management plan for the receiving land.

The Applicant has confirmed, as stated at the beginning of Section 4.10, that they will comply with these requirements. We are satisfied with the measures proposed in respect of manure and wash water that will not be spread on land owned or controlled by the Operator and that we can ensure the Operator takes appropriate measures.

As the Code of Good Agricultural Practice (CoGAP) (which is a practical guide to help farmers, growers and land managers protect the environment in which they operate) states the most economic and environmentally friendly way of dealing with livestock manures (slurry and solid manure) and dirty water will usually be to apply them to agricultural land at appropriate rates for the benefit of soil and the crop. The spreading of this material to land is a normal process.

We are satisfied that the site will comply with BAT and with 'EPR 6.09 Sector Guidance Note – How to Comply with your environmental permit for intensive farming (EPR 6.09) (version 2) and, that no pollution of ground waters or surface waters will occur as a result of emissions from the Installation. Whilst we cannot directly regulate the application of manure and slurry outside the Installation boundary under the permit, we are satisfied the Operator will take appropriate measures to comply with condition 2.3.5 to minimise the impact from its export. In addition, the other controls described above will provide environmental protection from its spreading.

Farming Rules for Water and the NVZ regulations contain restrictions for the storage and spreading of manure and slurry that must be adhered to. Further information can be accessed via the following links:

[Using nitrogen fertilisers in nitrate vulnerable zones - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/using-nitrogen-fertilisers-in-nitrate-vulnerable-zones)

[Storing organic manures in nitrate vulnerable zones - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/storing-organic-manures-in-nitrate-vulnerable-zones)

[Storing silage, slurry and agricultural fuel oil - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/storing-silage-slurry-and-agricultural-fuel-oil)

[Farming rules for water from April 2018 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/farming-rules-for-water-from-april-2018)

[Rules for farmers and land managers to prevent water pollution - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/rules-for-farmers-and-land-managers-to-prevent-water-pollution)

[Protecting our water, soil and air - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/protecting-our-water-soil-and-air)

[The Nitrate Pollution Prevention Regulations 2015 \(legislation.gov.uk\)](https://www.legislation.gov.uk/uksi/2015/1004)

[Use organic manures and manufactured fertilisers on farmland - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/use-organic-manures-and-manufactured-fertilisers-on-farmland)

[Intensive farming: comply with your environmental permit - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/intensive-farming-comply-with-your-environmental-permit)

## River Wye Action Plan

We are aware of the recent announcement of the River Wye Action Plan: [River Wye Action Plan - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/river-wye-action-plan).

We have reviewed the content of the plan and specifically future potential changes to the EPR regulations linked to manure management. We note that the exact scope of or timescales for any changes is yet to be finalised.

We can only determine this permit based on the current EPR regulations.

We will keep this situation under regular review and if and when legislation changes we will consider what, if any, changes are required to any permit that is to be or has been issued. This includes, if appropriate, the variation of any relevant permit that has been issued.

## **5. Other considerations**

During the determination of the Application, we have also taken the points below into consideration.

### **5.1 Operator competence**

We must not grant a permit to an applicant where we consider they will not operate the Installation or will not do so in accordance with a permit. In determining whether this may be the case, we consider whether an applicant: can demonstrate technical competence, has suitable management systems, has any relevant convictions and is financially competent, as stated in Defra Core Guidance and our online guidance 'What a competent operator is' in section [Legal operator and competence requirements: environmental permits - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/what-a-competent-operator-is).

Operation of an intensive farming installation does not require compliance with an approved scheme to demonstrate technical competence (as would be the case, for example, for a waste operation). Instead, an operator demonstrates technical competence by way of their management system that staff training and development requirements are met, along with provision for keeping up to date with technical and legislative changes. In this case we are satisfied with the Applicant's management systems. Permit condition 1.1 also ensures that these management systems are followed so that the Operator remains 'competent' throughout the life of the Permit.

An applicant's compliance record includes a review of relevant convictions and can take into account any known breaches of other regulatory regimes. The provisions of the Rehabilitation of Offenders Act 1974 require convictions of individuals to be considered spent after a prescribed period and we treat corporate operators in the same way. In this case no relevant convictions were identified for the Applicant.

Financial competence for intensive farm installations is based on whether an applicant has any current or past insolvency and bankruptcy proceedings. We are not aware of any such proceedings against this Applicant.

The operator competence checks have therefore been carried out in line with our guidance and we are satisfied that the Operator meets the requirements.

The Operator is required to operate the Installation in accordance with an Environmental Management System (EMS) under condition 1.1 of the Permit. The Operator commits to the operating techniques as described in the Application and as incorporated into the Permit in condition 2.3.1 and associated Table S1.2. Any deviation from either of these would be a breach of the Permit, and action would be taken in accordance with our enforcement and sanctions statement and guidance.

We are also satisfied that the Applicant is the legal entity that will have control over the operation of the Installation after the grant of the Permit. The decision was taken in accordance with guidance here: [Legal operator and competence requirements: environmental permits - GOV.UK \(www.gov.uk\)](https://www.gov.uk/legal-operator-and-competence-requirements-environmental-permits)

## 5.2 Other legal requirements

In this section we explain how we have addressed other relevant legal requirements, to the extent that we have not addressed them elsewhere in this document.

### 5.2.1 Schedules 1 and 7 to the Permitting Regulations – IED

We address the requirements of the IED in the body of this document above.

One requirement not addressed above is that contained in Article 5(3) IED. This requires that “In the case of a new installation or a substantial change where Article 4 of Directive 85/337/EC (now Directive 2011/92/EU) (the EIA Directive) applies, any relevant information obtained or conclusion arrived at pursuant to articles 5, 6 and 7 of that Directive shall be examined and used for the purposes of granting the permit.”

- Article 5 of the EIA Directive relates to the obligation on developers to supply the information set out in Annex IV of that Directive when making an application for development consent.
- Article 6(1) requires Member States to ensure that the authorities likely to be concerned by a development by reason of their specific environmental responsibilities are consulted on the Environmental Statement and the request for development consent.
- Articles 6(2)-6(6) make provision for public consultation on applications for development consent.
- Article 7 relates to projects with transboundary effects and consequential obligations to consult with affected Member States.

The EIA Directive has been implemented through the planning regime and is a matter for the relevant local planning authority. The Environment Agency’s obligation is therefore only to examine and use any relevant information obtained or conclusion arrived at by the local planning authorities pursuant to those EIA Directive Articles.

In this case the Applicant has not made an application for planning permission and therefore there is no relevant information from the planning process for the Environment Agency to consider. However, the EPR application process ensures we have all the information relevant to our determination and in practice we have substantially the same ‘relevant’ information as would have been available through an EIA. The Environment Agency has taken into account information provided through the Application concerning potential risks to the environment posed by the Installation. The measures imposed by the Permit ensure that those risks are mitigated such that the Installation does not risk an unacceptable level of pollution.

### 5.2.2 Schedule 22 to the Permitting Regulations – Water Framework and Groundwater Directives

To the extent that it might lead to a discharge of pollutants to groundwater (a “groundwater activity” under the EPR 2016), the Permit is subject to the requirements of Schedule 22, which delivers the requirements of EU Directives relating to pollution of groundwater. The Permit will require the taking of all necessary measures to prevent the input of any hazardous substances to groundwater, and to limit the input of non-hazardous pollutants into groundwater so as to ensure such pollutants do not cause pollution and satisfies the requirements of Schedule 22.

No releases of pollutants to groundwater from the Installation are permitted. The Permit also requires material storage areas to be designed and maintained to a high standard to prevent accidental releases.

### **5.2.3 Directive 2003/35/EC – The Public Participation Directive**

Regulation 59 of the Permitting Regulations requires the Environment Agency to prepare and publish a statement of its policies for complying with its public participation duties. We have published our public participation statement.

This Application has been consulted upon in line with this statement. This satisfies the requirements of the Public Participation Directive. Our draft decision in this case has been reached following a programme of extended public consultation.

### **5.2.4 Environment Act 1995**

#### **(i) Section 4 (Pursuit of Sustainable Development)**

We are required to contribute towards achieving sustainable development, as considered appropriate by Ministers and set out in guidance issued to us. The Secretary of State for Environment, Food and Rural Affairs has issued The Environment Agency's Objectives and Contribution to Sustainable Development: Statutory Guidance (December 2002). This document:

*provides guidance to the Agency on such matters as the formulation of approaches that the Agency should take to its work, decisions about priorities for the Agency and the allocation of resources. It is not directly applicable to individual regulatory decisions of the Agency*

In respect of regulation of industrial pollution through the Permitting Regulations, the Guidance refers in particular to the objective of setting permit conditions "in a consistent and proportionate fashion based on Best Available Techniques and taking into account all relevant matters...". The Environment Agency considers that it has pursued the objectives set out in the Government's guidance, where relevant, and that there are no additional conditions that should be included in this Permit to take account of the Section 4 duty.

#### **(ii) Section 5 (Preventing or Minimising Effects of Pollution of the Environment)**

We are satisfied that our pollution control powers have been exercised for the purpose of preventing or minimising, remedying or mitigating the effects of pollution.

#### **(iii) Section 6(1) (Conservation Duties with Regard to Water)**

We have a duty to the extent we consider it desirable generally to promote the conservation and enhancement of the natural beauty and amenity of inland and coastal waters and the land associated with such waters, and the conservation of flora and fauna which are dependent on an aquatic environment.

We consider that no additional or different conditions are appropriate for this Permit to fulfil these duties.

#### **(iv) Section 6(6) (Fisheries)**

We have a duty to maintain, improve and develop fisheries of salmon, trout, eels, lampreys, smelt and freshwater fish.

We consider that no additional or different conditions are appropriate for this Permit to fulfil these duties.

#### **(v) Section 7 (Pursuit of Conservation Objectives)**

This places a duty on us, when considering any proposal relating to our functions, to have regard amongst other things to any effect which the proposals would have on sites of archaeological, architectural, or historic interest; the economic and social well-being of local

communities in rural areas; and to take into account any effect which the proposals would have on the natural beauty or amenity of any rural area.

We consider that no additional or different conditions are appropriate for this Permit to fulfil these duties.

**(vi) Section 39 (Costs and Benefits)**

We have a duty to take into account the likely costs and benefits of our decision ('costs' being defined as including costs to the environment as well as any person). This duty, however, does not affect our obligation to discharge any duties imposed upon us in other legislative provisions.

In so far as relevant we consider that the costs that the Permit may impose on the Applicant are reasonable and proportionate in terms of the benefits it provides.

**(vii) Section 81 (National Air Quality Strategy)**

We have had regard to the National Air Quality Strategy and consider that our decision complies with the Strategy, and that no additional or different conditions are appropriate for this Permit.

**(viii) Clean Air Strategy 2019**

We have had regard to the Clean Air Strategy 2019 and consider that our decision complies with the Strategy, and that no additional or different conditions are appropriate for this Permit

**(ix) National Emissions Ceiling Regulations 2018**

We have had regard to the National Air Pollution Control Programme and consider that our decision complies with the Strategy, and that no additional or different conditions are appropriate for this Permit.

## **5.2.5 Human Rights Act 1998**

We have considered potential interference with rights addressed by the European Convention on Human Rights in reaching our decision and consider that our decision is compatible with our duties under the Human Rights Act 1998. In particular, we have considered the right to life (Article 2), the right to a fair trial (Article 6), the right to respect for private and family life (Article 8) and the right to protection of property (Article 1, First Protocol). We do not believe that Convention rights are engaged in relation to this determination.

## **5.2.6 Countryside and Rights of Way Act 2000**

Section 85 of this Act imposes a duty on Environment Agency to have regard to the purpose of conserving and enhancing the natural beauty of the area of outstanding natural beauty (AONB). There is no AONB which could be affected by the Installation.

## **5.2.7 Wildlife and Countryside Act 1981**

Under section 28G of the Wildlife and Countryside Act 1981 the Environment Agency has a duty to take reasonable steps to further the conservation and enhancement of the flora, fauna or geological or physiographical features by reason of which a site is of special scientific interest. Under section 28I the Environment Agency has a duty to consult Natural England in relation to any permit that is likely to damage SSSIs.

We assessed the Application and concluded that the Installation will not damage the special features of any SSSI. This assessment is summarised in greater detail in section 4.1 of this document.

## **5.2.8 Natural Environment and Rural Communities Act 2006**

Section 40 of this Act requires us to have regard, so far as is consistent with the proper exercise of our functions, to the purpose of conserving biodiversity. We have done so and consider that no different or additional conditions in the Permit are required.

## **5.2.9 Deregulation Act 2015**

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 grant the 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 the Permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This ensures that environmental impacts from the Installation will not adversely affect the growth of local businesses. It 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.

## **5.2.10 Conservation of Habitats and Species Regulations 2017**

We have assessed the Application in accordance with guidance agreed jointly with Natural England and concluded that there are no SAC, SPA or Ramsar sites which could be affected by the Installation.

## **5.2.11 Water Environment (Water Framework Directive) Regulations 2017**

Consideration has been given to whether any additional requirements should be imposed in terms of the Environment Agency’s duty under regulation 3 to secure compliance with the requirements of the Water Framework Directive, Groundwater Directive and the EQS Directive through, amongst other things, environmental permits, and its obligation in regulation 33 to have regard to the river basin management plan (RBMP) approved under regulation 31 and any supplementary plans prepared under regulation 32. However, it is felt that existing conditions are sufficient in this regard and no other appropriate requirements have been identified.

The only discharge to surface water from the installation is of clean water. We are satisfied that granting this application with the conditions proposed would not cause the current status of the water body to deteriorate, and that it will not compromise the ability of this water body to achieve good status by 2027.

In taking this decision we have applied the physico-chemical standards, environmental quality standards and biological element status boundary values for surface water bodies specified in Articles 8-10 of, and Schedule 3 to, the Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015.



# Annex 1: Consultation, web publicising and newspaper advertising responses

## Advertising and Consultation on the Application

The Application has been advertised and consulted upon in accordance with the Environment Agency's Public Participation Statement. The way in which this has been carried out along with the results of our consultation and how we have taken consultation responses into account in reaching our draft decision is summarised in this Annex. Copies of all consultation responses have been placed on the Environment Agency public register.

The Application was advertised on the GOV.UK website from 16 May 2022– 14 June 2022. Copies of the Application were placed on our public register at the Environment Agency's offices at Riversmeet House, Newtown Industrial Estate, Northway Lane, Tewkesbury, Gloucestershire GL20 8JG. Additionally, we also published this Application on our web pages on GOV.UK and made available electronic copies of the Application on the webpage. We also posted flyers to local residents and to Kington Town Council (by email), making them aware of this application.

The following statutory and non-statutory bodies were also consulted:

- Herefordshire Council (Environmental Health)
- UK Health Security Agency (PHE)
- Director of Public Health, Herefordshire County Council
- Health and Safety Executive (HSE)

## 1) Consultation Responses from Statutory and Non-Statutory Bodies

Response received from
UK Health Security Agency (UKHSA) (received 07/06/2022)
Brief summary of issues raised
<p>The application is for a permit to operate an intensive farming installation, with 215,000 broiler chicken rearing places. This would be a variation on current operations which involves rearing 34,000 stag turkeys.</p> <p>The main emissions of potential public health significance are emissions to air of bioaerosols, dust including particulate matter and ammonia. The applicant notes that there are residential receptors located in close proximity to the rearing houses (7m to North, 60m to South), and additional commercial receptors to the East. The applicant includes detailed ammonia dispersion modelling, which demonstrates a reduction in process contribution to nearby ecological receptors under the proposed activities, although some exceedances are still likely on the River Arrow. However, modelling showed that the long-term EAL of 180 µg/m<sup>3</sup> is unlikely to be exceeded at nearby residential and commercial receptors.</p> <p>The applicant states that any foul water will be collected in tanks for off-site disposal. The applicant also provides measures that are intended to mitigate fugitive odour, dust and bioaerosol emissions. The application details olfactory testing for odour at the site boundary and has a complaints procedure in place. However, there is no action level for fugitive dust and bioaerosol emissions. It is therefore recommended that owing to the close proximity of residential receptors downwind of poultry houses, that an action limit for dust and bioaerosol emissions and monitoring be agreed with the applicant and included in the permit conditions.</p> <p>Agriculture in the UK is acknowledged as a significant source of PM<sub>10</sub> (particulates with a diameter of less than or equal to 10 µm) with the estimated contribution ranging from 5% to 15%, with poultry houses being responsible for some 5% of UK emissions. Potential sources of PM<sub>10</sub> 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 PM<sub>10</sub> levels and hospital</p>

admissions for both respiratory and cardiac diseases and mortality. Particularly vulnerable receptors include older persons (>65 years) and, for respiratory illness, children.

Recent studies on large poultry farms have indicated exceedance of PM<sub>10</sub> objectives of the National Air Quality Strategy to be dependent on environmental circumstances such as topography and raised background concentrations from additional PM<sub>10</sub> sources nearby.

UKHSA expects that the use of 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 PM<sub>10</sub> 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. As the applicant notes that there are sensitive receptors within 100m from the boundary of such units the applicant has carried 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 which clearly demonstrated that published studies have so far detected inconsistent results with studies reporting no effect, mixed effects, harmful effects and positive 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 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 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](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

##### Dust and bioaerosols:

The original dust and bioaerosol management plan (DBMP) based the distances of the sensitive receptors from a boundary indicated in a plan as land owned by the Applicant, and which extended to the north and south of the actual Installation boundary. This resulted in properties located to the north of the Installation and additional properties to the south and southeast being included, including the one stated above as 7m from the boundary, located to the north. In reality these receptors are more than 100m from the Installation boundary. A revised DBMP was submitted on 30/03/23 with the correct number and distances of receptors located within 100m of the Installation boundary and confirms there is one receptor approximately 24m to the south of the Installation boundary, which is the Applicant's farmhouse, and approximately 43m from the nearest poultry house. Other receptors within 100m from the Installation boundary include 12 industrial units located to the east of the Installation boundary at approximate distances of 18m, 25m, 28m (which is a collection of industrial units all within one building), 30m, 42m, 60m, 61m, and 95m.

As detailed in Key Issues section 4.5 Dust and Bioaerosols above, we are satisfied that measures outlined in the DBMP and Application will prevent, and where that is not practicable minimise, dust and bioaerosol emissions from the Installation and prevent significant pollution or harm to human health. We are also satisfied that we have sufficient controls within the permit conditions to enable further measures to be implemented should these be required.

In addition, we consider the potential risk to human health at receptors downwind of the Installation, located more than 100m from the Installation boundary, is low therefore we do not require an action limit for dust and bioaerosol emissions and monitoring be agreed with the Applicant and included in the permit conditions. Our approach to minimising dust and bioaerosol emissions is to ensure relevant control measures for both point source and fugitive emissions are included in the relevant management plan as opposed to monitoring, which is complex and impractical to achieve for all dust emissions including from fugitive emissions.

The Applicant is required to report complaints, and the revised DBMP has included a complaints procedure specifically for dust complaints.

Future permit reviews are outside the scope of this determination, but as and when they occur, all relevant information will be considered.

Particulate matter:

Our approach to dust and bioaerosol environmental control is to require a dust and bioaerosol management plan for intensive farming installations with receptors within 100 metres of the Installation boundary. By reducing total overall dust levels this then reduces PM10 and PM2.5 particle size dust, with most of the measures focusing on reducing creation of dust at source. This is an agreed approach with former Public Health England (now UKHSA) and the Environment Agency. This is a robust approach requiring the listing of both point and fugitive emissions and listing of controls to minimise impact on human health.

Ammonia:

The Environment Agency has completed an assessment, using conservative assumptions, with regards to ammonia and has concluded that at nearby receptor locations the impact is unlikely to exceed long term 18 µg/m<sup>3</sup> and short term 250 µg/m<sup>3</sup> which is less than 1% and 10% of the respective values. We conclude that ammonia from the Installation is unlikely to have a significant health impact on human receptors, given the conditions imposed by the Permit.

To prevent significant emissions from the site the Applicant has proposed appropriate measures to manage emissions, in accordance with our technical guidance note for intensive farming and the BAT Conclusions document, including ammonia, bioaerosols and particulates. These measures include the use of appropriate ventilation systems, appropriate housing design and management, containment of feedstuff and management of poultry litter. We are satisfied that these measures will mitigate emissions to prevent a significant impact from the site (see sections 4.2 and 4.5 for further details of our assessment with regards to fugitive emissions of ammonia, dust and bioaerosols).

In summary, the Environment Agency is satisfied, following a review of the information provided by the Applicant, and the conditions present within the Permit, that appropriate measures are in place to minimise the risk of pollution from the Installation. The Environment Agency is satisfied that on-site activities will not give rise to significant pollution of the environment or harm to human health.

Response received from
Health and Safety Executive (HSE) (received 10/06/2022)
Brief summary of issues raised
HSE have no comments to make concerning this application.
Summary of actions taken or show how this has been covered
No response required.

Response received from
Herefordshire Council – Environmental Health & Trading Standards (received 19/07/2022 & 07/09/2022 & 07/12/2022 & 23/11/2023 & 01/12/2023)
Brief summary of issues raised
<p>I refer to the above application for an A1 EPR permit to increase the number of units to house 215,000 broilers and I would make the following comments in relation to air quality.</p> <p>According to the application documents the operator's residence is within 50m of the poultry units. There is also a number of residential dwellings approximately 100m distance from the poultry units.</p> <p>DEFRA has advised that poultry rearing operations should be included in the assessment for Local Air Quality Management (LAQM) and has published a screening assessment methodology for PM10's taking into considerations the number of birds, the distance of the receptor to the poultry units and the background PM10 concentrations. (TG16)</p> <p>The number of birds on the application site are below DEFRA's screening threshold of 400,000, however the poultry units are in relatively close proximity to the operators dwelling. The application refers to the units being heated by LPG, which will not increase the potential for PM10 emissions. I am not aware if there are any other sources of PM10 within close proximity to the poultry houses and residential dwellings.</p> <p>You may wish to ask the operator to undertake the screening calculation in LAQM TG16 to determine if further assessment is required in terms of PM10.</p> <p>I have reviewed the files and I am not aware of any noise or nuisance complaints in relation to the existing bird units.</p> <p>Further responses received on <b>07/09/2022</b> and <b>07/12/2022</b> from Herefordshire Council stating that they had been made aware of recent complaints (in August 2022) relating to noise and odour (five complainants in total with all being provided with log sheets, with one being returned in October 2022 detailing incidents of odour on several occasions and an incident of noisy fans) from the farm but their conclusion was that there was no Statutory Nuisance, but does appear that there was some instances of odour and noise occurrence.</p> <p>Further responses were received on <b>23/11/2023</b> and <b>01/12/2023</b> from Herefordshire Council detailing a complaint received in November 2023 of noise from the farm and stating that they'd started an investigation process with regards to Statutory nuisance noise and odour issues with a request to the company to review the matter and respond by 18/12/2023. Information was also presented which stated that within the last year, the Council had received seven noise complaints and six odour complaints from six different residential properties in the area.</p>
Summary of actions taken or show how this has been covered
<p>As mentioned in response to UKHSA comments above and in Key issues section 4.5, our approach to dust and bioaerosol environmental control is to require a dust and bioaerosol management plan for intensive farming installations with receptors within 100 metres of the Installation boundary. By reducing total overall dust levels this then reduces PM10 and PM2.5 particle size dust with most of the measures focusing on reducing creation of dust at</p>

source. This is an agreed approach with former Public Health England (now UKHSA) and ourselves.

This is a robust approach to require listing of both point and fugitive emissions and listing of controls to minimise impact on human health. This is considered a robust all-encompassing approach than quantitative modelling which will not cover fugitive releases. We therefore do not require the Operator to undertake the screening calculation in LAQM to determine if further assessment is required for PM10.

Please note that historic complaints relate to the current unregulated facilities and that there will be appropriate measures in place as detailed in the OMP, which will be enforceable under the permit. No substantiated odour complaints have been confirmed for this site.

With regard to odour, the Applicant submitted a revised OMP on 28/06/23 and we are satisfied that the measures outlined will minimise the potential for odour emissions from the Installation. Odour levels at the Installation will be monitored daily to detect elevated odours. Formal odour monitoring will be conducted weekly by persons not involved directly with the broiler production, as well as monitoring for offsite odour, in response to any assessment by the Operator and/or as a result of substantiated complaints. A contingency plan has been included within the OMP in the event that any of the normal operating measures fail and abnormally high odours are detected. A list of primary and secondary remedial measures is included in the contingency plan, including triggers for commencing and ceasing use of these measures and time frames for putting measures in place. Standard condition 3.3.1 concerning odour is contained within the permit. (see section 4.3 above for further detail). This revised OMP 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', our Top Tips Guidance and the 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.

Although we consider that the OMP complies with the relevant guidance and will prevent, and where that is not practicable, minimise the emission of odour, we have as an additional layer of protection have included a pre-operational condition PO1 and improvement condition IC1, which requires the Operator to firstly provide a monitoring programme for their proposal to install a heat exchanger to reduce odour emissions, and secondly to provide a report detailing the results of that monitoring and subsequent requirements within IC1 which will require an analysis of whether further odour control measures are required at the Installation.

With regard to noise: as there have been no substantiated complaints of noise nuisance at this stage, we feel the measures in place, as detailed in Key Issues section 4.4 above will minimise the potential for noise beyond the Installation boundary. Although we consider that the NMP complies with the relevant guidance and will prevent, and where that is not practicable, minimise the emission of noise, we have as an additional layer of protection, included an improvement condition (IC2) to review whether this is the case and in the unlikely event it is not then further measures will be required.

This condition requires the Operator to undertake a review of the effectiveness of noise control measures at the Installation and submit that review to the Environment Agency for approval after the Installation has been operational for 12 months (or if requested sooner by the Environment Agency). 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.

'As discussed in section 4.3 and 4.4 of this document, the Environment Agency is satisfied following a review of the information provided by the Applicant, and the conditions present within the Permit, that emissions from the site (including odour and noise) from the Installation will not cause significant pollution of the environment or harm to human health.

The Director of Public Health, Herefordshire County Council was also consulted but no response was received.

**2) Consultation Responses from Members of the Public and Community Organisations / County / Parish / District Councillors**

The consultation responses received were wide ranging and a number of the issues raised were outside the Environment Agency’s remit in reaching its permitting decisions. Specifically, questions were raised which fall within the jurisdiction of the planning system, both on the development of planning policy and the grant of planning permission.

a) Representations from County / Parish / District Councillors

None received.

b) Representations from Community and Other Organisations

Representations were received from:

Response received from
Fish Legal (received 25/05/2022)
Brief summary of issues raised
<p>1. Nutrient neutrality The development is adjacent to the River Arrow and close to other streams where there are high risks of pollution impacting sensitive species and protected sites. The application is also made at a time when Natural England’s advice and guidance requires that plans or projects likely to impact protected sites must demonstrate nutrient neutrality, which this application does not.</p> <p>2. The River Arrow The River Arrow is a tributary of the river Lugg, a SSSI and a tributary of the River Wye SAC. Salmon migrate upstream from the Wye to the Lugg and Arrow to spawn; the river is therefore a spawning and nursery habitat for the Wye. The Arrow also holds genetically unique strains of wild brown trout as well as white clawed crayfish, both of which are protected under the Conservation of Habitats and Species Regulations 2017. It is also notable that the river contains sensitive ranunculus beds which are crucial to the Arrow salmonid habitat.</p> <p>3. Sensitivity to pollution Spawning salmonids require clean water with high oxygenation. Pollutants such as ammonia, nitrogen, and phosphates (all by-products of poultry farming) lead to a reduction in oxygen levels, eutrophication and the destruction of spawn and ranunculus beds. The Arrow is in a Nitrate Vulnerable Zone which requires sensitive farming. Any activities which are likely to increase the polluting nutrient load in the catchment present a real risk to protected species and sites, whether directly or indirectly. Such potential impacts must be assessed and tested through the HRA and Appropriate Assessment process, which is absent from this application.</p> <p>4. The application The supporting documents provided for consultation are too brief and vague to provide a full description of the application. Specifically, there is a near-total absence of clear, measurable, and verifiable plans for the management of waste including storage and disposal as well as safeguards to avoid pollution. We note that there has been no parallel application for planning permission. We believe such an application is necessary for the development to go ahead.</p> <p>5. Manure management and disposal The proposal, if permitted, will result in significant increases in the production of both manure and wash-water waste. These waste products have extremely high concentrations</p>

of polluting nutrients. However, the “Waste Management” document contains no information on their management.

There is no plan provided, for instance, to explain how manure would be stored and dealt with during (and at the end of) each cycle. If there will be no on-site storage of manure (as per the applicant’s response to EA queries) then the plans for its removal and details on its ultimate destination and use must be set out in full. It is not clear, for instance, whether the manure will be spread on fields close to the river or close to other sensitive receptors. Wash-water will apparently be stored on site. But the application documents do not provide a sufficient description of the storage methods, how pollution risk is to be managed, and when, how, and where the wash water will be disposed of.

6. Surface water drainage

The “Drainage Layout” document (which is surprisingly in Excel format) is very difficult to interpret. A detailed drainage layout plan is vital for this application as we understand that the intention is for surface water to drain directly into the River Arrow.

There should be a much more detailed explanation of how contaminated wash-water and “clean” surface water will be kept separate. The application also needs to estimate the anticipated volumes of discharge directly into the Arrow and outline measures to prevent and mitigate pollution.

7. Ammonia and nitrogen level exceedances

We have significant concerns with the “Modelling Report on Ammonia”. The document does not take into account all possible emissions of ammonia for the following reasons: firstly, it is a partial assessment as it does not include consideration of storage (including temporary storage), clean-out and spreading of manure and other waste, which are the chief mechanisms for pollution of watercourses. Secondly, it does not seem to allow for the eight-fold increase in the number of cleaning cycles due to the change from turkeys to chickens. We understand that whereas turkey manure is cleaned out once every year, chickens will have up to 8 cycles of cleaning which would require proper assessment; such assessment has not been carried out for the purposes of the present application. The conclusion of the report is that the existing poultry houses are already exceeding emissions levels for ammonia and nitrogen deposition, set at 3 micrograms/m<sup>3</sup> and 10 kg/ha by the Environment Agency.

For the proposed poultry houses, the report concludes that the emissions will still exceed limits for receptors such as the Arrow and Gladestry Brook. The argument, therefore, that the development presents a betterment for the site ignores the fact that there is still a breach of environmental standards which must be addressed.

Summary of actions taken or show how this has been covered

1. Nutrient neutrality: the use of pig or poultry slurries and manures on land in England is regulated through The Reduction and Prevention of Agricultural Diffuse Pollution (England) Regulations 2018 (commonly known as the Farming Rules for Water) and, in designated areas, The Nitrate Pollution Prevention Regulations 2015. Both regulations seek to prevent pollution through restricting when, where and how much manure or slurry can be applied. Following receipt of additional government funding, the Environment Agency have significantly increased our inspections against these regulations. Please see Key Issues section 4.10 for further information.
2. The River Arrow: this nature conservation site is designated as a Local Wildlife Site and has been included in our assessment of ammonia impacts (see Key Issues section 4.1 above). If we do not permit the Installation, they can continue to operate below the threshold required for an EPR permit with the higher airborne ammonia emissions impacting the River Arrow. Details of assessment of site drainage can be found in Section 4.6 of this document. Roof water from all six houses and yard water drains to either French drains (acting as soakaways) or soakaways via a combination of gutters, downpipes, and clean water drains (precise details can be found in section 3.3 above). Some drainage is also discharged to the River Arrow, via settlement pits and sediment traps. Soakaways and sediment traps/pits are considered to be sufficient interception and treatment for potentially lightly contaminated water (as stated in EPR6.09 ‘How to comply with your environmental permit for intensive farming’) although in this instance the roof water is considered clean, as described above, and only clean yard water is discharged to soakaways and to the River Arrow (via 3 settlement pits and traps –

these allow any sediments to separate out prior to discharge. At any time when the yard may be contaminated (e.g. during catching, mucking out or washing), water from the yard drains to underground dirty water tanks. We therefore do not believe the River Arrow will receive any contaminated run-off from the Installation, which could impact the species or habitat referenced. The Permit will ensure (for example via the management condition 1.1 and the operating techniques condition 2.3) that the Operator keeps these areas clean to minimise potential pollution, a level of control which having a site permitted allows.

3. Sensitivity to pollution: as detailed above, we have included the River Arrow LWS in our ammonia assessment. Detailed ammonia modelling has demonstrated that the proposal will have a reduction of more than 40% in process contributions of ammonia, acid and nitrogen deposition from the proposed broiler farm when compared to the existing turkey farm. We conclude that there will be no significant pollution at any LWS, including the River Arrow LWS (Please see Key Issues section 4.10 for further information). As this site is not designated as a SAC, SPA or Ramsar site, we are not required to complete an HRA Stage 1 and associated HRA Stage 2 Appropriate Assessment, required under the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations). Spreading of manure in an NVZ has been considered in Key Issues section 4.10 above.
4. The application: we have accepted the application and supporting documentation, seeking further information for our assessment where necessary. We are satisfied that we have received sufficient information to enable us to determine the application. Our decision is independent of any planning permission application and decision; however, the Operator will require the appropriate planning permission to be in place if applicable.
5. Manure management and disposal: under the EPR permit the Operator will be required to have their own manure management plan when spreading manure and wash water on land owned or associated with them, and ensure similar arrangements are in place for any third parties receiving manure and wash water from them. No manure is stored on site, and wash water storage is in accordance with the requirements detailed in How to Comply 6.09. Please see Key Issues section 4.10 for further information. Furthermore, BAT Conclusions 3 and 4 ([https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\\_.2017.043.01.0231.01.ENG&toc=OJ:L:2017:043:FULL](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.043.01.0231.01.ENG&toc=OJ:L:2017:043:FULL)) require the Operator to adopt a nutritional strategy to reduce the levels of N and P excretion and demonstrate they are meeting the BAT associated excretion levels given in table 1.1 and table 1.2 of the BAT conclusions document. The Applicant has confirmed they have checked the relevant levels and can comply with them. They will also be required to calculate or analyse manure and/or slurry to estimate N and P excretion and report this to the Environment Agency annually.
6. Surface water drainage: site drainage is described in section 3.3 above, and further assessment is covered in Key Issues section 4.6. We do not require an estimation of the volumes of clean water discharged to the River Arrow. We are satisfied that the site drainage meets BAT and all measure proposed will prevent or minimise pollution to surface water.
7. Ammonia and nitrogen level exceedances: we have audited the ammonia modelling and assessed the ammonia impacts in Key Issues sections 4.1 and 4.2 above. There will be a significant reduction compared with the existing turkey operations on site. Overall, our detailed modelling review outlined in section 4.1 concludes that the process contributions of ammonia, nitrogen and acid are below 100% of the relevant critical level (CL<sub>e</sub>) or critical load (CL<sub>o</sub>) for all LWS, including Gladestry Brook, with the exception of process contribution for nitrogen deposition for the River Arrow. With regards to nitrogen deposition, for the majority of the area (99.3%) even for the worst-case woodland deposition, the process contribution is below 100% of the critical load, except for a negligible 0.7% of the total habitat. We conclude there will be no significant pollution at any LWS and that the proposed broiler activity will have less of an impact



than the existing operations that do not require a permit. At the time of this determination the turkey farm is still operational to the level used to evaluate the baseline habitat assessment. Furthermore, the Operator has the potential to stock up to 40,000 turkeys at any time, without requiring an environmental permit.

Response received from

Herefordshire Campaign to Protect Rural England (CPRE) (received 08/06/2022)

Brief summary of issues raised

A range of issues were raised related to:

1. Air Quality

The ammonia modelling shows that ammonia concentrations and background nitrogen deposition rates already exceed the lower critical levels and loads to native woodland and short vegetation, indicating that local biodiversity is under threat if not already damaged.

It is unclear why the EA emission factors indicate that the switch from turkeys to broilers would result in a reduction in ammonia emissions, given that broilers would produce significantly higher quantities of nutrients than the turkeys (see below). Research in the US has shown that emission factors used for broilers are twice as high as previously estimated. <https://environmentalintegrity.org/news/ammonia-emissions/>

Based on the EA's 2013 emission factors, the modelling indicates that the change from turkeys to broilers will reduce air emissions from the site. However, the modelling does not include either emissions generated during clean-out or from manure spreading, which are the biggest sources of emissions. The turkey operation generated 3-4 crops per annum, whereas the broiler units would generate 7-8 or possibly more if the birds are cropped at a younger age as happens on some sites.

Given that only 27% of emissions from intensive poultry units arise from the buildings themselves, it is likely that there will in fact be an increase in ammonia emissions and a consequent deterioration in air quality as a result of more frequent clean-outs, rather than an improvement as the modelling suggests. (Source: <https://www.sciencedirect.com/science/article/abs/pii/S1537511004001199?via=ihub>)

We note that the EA does not require assessment of air emissions from the spreading or other disposal of the poultry manure, although this clearly poses an environmental risk given the local high levels of ammonia concentrations and nitrogen deposition, including a risk to the Wye SAC.

Natural England's guidance on the Conservation Objectives for the Wye SAC advises that.

*"Airborne ammonia contributes to nitrogen in rivers and needs to be considered as part of the overall nitrogen budget for the catchment. All agricultural and development activities that are carried out within a catchment and have the potential to contribute to the in-river concentrations of nutrients.*

*Airborne ammonia limits are referred to a 'critical loads'. A critical load of 1 µg/m<sup>3</sup> should be applied where there is bryophyte interest. When there is no bryophyte interest then a critical level of 3 µg/m<sup>3</sup> should be for the River Wye SAC due to potential impacts on fish including salmon...*

*There are currently no critical levels for freshwater species and aquatic habitats and in this case we defer to the surrounding vegetation type such as transition mire or oak woodland. In both cases the critical load for nitrogen is exceeded within the Wye catchment and, therefore it can be presumed that there is a requirement to restore to site target."*

In order to comply with the Conservation of Habitats and Species Regulations 2017, the EA should demonstrate, beyond reasonable scientific doubt, before the granting of a new

environmental permit, that the installation will not have an adverse impact on the SAC through aerial emissions.

The EA is unable to do this based on the partial assessment of ammonia emissions and nitrogen deposition provided by the applicant.

### 2. Manure spreading/disposal

The change from the production of turkeys to broilers will result in more than doubling of the quantity of manure produced.

The standard values from Annex 6 of DEFRA's guidance on compliance with the NVZ Regulations provide the following figures for manure production from the existing operation and from that proposed in the permit application:

34,000 stag turkeys - 1,754.4 tonnes of manure per year

215,000 broilers - 3,870 tonnes of manure per year

The manure would be produced in the Lugg catchment, where there is a planning moratorium on development that may pose a risk of increased nutrient levels in the catchment waterbodies. The environmental permit application provides no information about manure management and it appears that the Environment Agency does not require this because the manure would be taken off site.

It is consequently unclear how the EA could carry out an assessment of the likely risk of the development to the Wye SAC, as required by Reg. 63 of the Conservation of Habitats and Species Regulations 2017.

Based on Schedule One of The Nitrate Pollution Prevention Regulations 2015, the amount of phosphate produced on site would increase by around one third to 154.8 kg/day from 105.4 kg/day.

The increase in nitrogen generated will be even greater - 227.90 kg/day from broilers, compared with 127.60 kg/day from stag turkeys. These figures assume all the turkeys are stags, although the applicant documents indicate that a large proportion of the birds were hen turkeys in some years. The hen turkeys will have produced significantly less phosphate and nitrogen.

The recent research report published by the Rephokus Team at Lancaster University has confirmed that intensive poultry units are the main driver of the large annual surplus of phosphates in the River Wye, which are contributing to the ecological failure of the SAC.

The environmental permit application is in direct conflict with this advice and is likely to pose a risk of further pollution to the Wye if the permit is granted. The proposal would not deliver any overriding public interest benefit to outweigh that harm.

### 3. Human Health

The airborne pollution from the development also raises concern about the impacts on nearby residents. The units are 130 m from the nearest residential curtilage at Arrow View.

There is increasing evidence that ammonia and other emissions from intensive poultry units pose risks to human health.

A study by Dutch National Institute for Public Health and Utrecht University, Wageningen UR and the Netherlands Institute for Health Services Research, found reduced pulmonary function in residents living close to IPUs, while patients with Chronic Obstructive Pulmonary Disease (COPD), suffered more severe symptoms and needed more medication.

The research found a further relationship between incidence of pneumonia and proximity to IPUs, reporting "*strong indications that emissions of fine particulates from livestock farms*

*make people more susceptible to infections.” <https://www.rivm.nl/publicaties/veehouderij-en-gezondheid-omwonenden>*

A study in the UK found that bio-aerosols from intensive livestock farming pose risks to childhood respiratory health and the researchers say further research is needed to measure and monitor exposure in community settings.

<https://www.sciencedirect.com/science/article/pii/S1438463917305667>

A DEFRA Report in 2012 concluded that emission factors used in modelling for IPU developments were not reliable indicators of the actual particle emissions once the units were built and in operation.

The report concluded: *“The monitoring studies indicate that poultry farms have the potential to have a significant effect on daily mean PM10 concentrations, suggesting that exceedances of the AQS daily mean objective that applies in England, Wales and Northern Ireland (equivalent to a 90.4th percentile), could potentially occur in close proximity to large poultry farms.”\**

*\*\*“Review of Air Quality Impacts Resulting from Particle Emissions from Poultry Farms”. AECOM, commissioned by DEFRA, 2012.*

*Despite the proximity to residents, there is no modelling of bio-aerosols or odour and no consideration of ammonia impacts on human health with this permit application.*

Given the Covid19 pandemic and the outbreaks of avian flu, there should also be concerns about biosecurity in an operation so close to human residents, but there is no reference to the risk from diseases in the permit application documents.

#### 4. Traffic

The annual amount of traffic, mostly HGVs, will be increased to and from the site arising from the increase in numbers of clear-outs of broilers compared with turkeys; this will increase emissions from HGV fuel (nitrates and carbon) and their tyres. This will impact on local residents and those living alongside the access route from the A444 via Kington that is a narrow road with no pedestrian footpath.

#### 5. Buildings

The buildings are old, although they appear to have been refurbished over the past two decades. The application does not provide any information about the condition of the buildings or whether they are fit for the more intensive purpose proposed.

A new environmental permit should include more robust measures to reduce the risk to human health and to biodiversity, including to the River Wye SAC.

#### Summary of actions taken or show how this has been covered

1. Air quality – we have assessed the ammonia impacts on ecological receptors from the Installation – please see Key Issues section 4.1 ‘Ammonia emissions - ecological receptors’ above. We do not assess impacts from manure storage and land spreading beyond the Installation boundary. Manure exported from the Installation for storage and spreading outside the Installation is outside the scope of our determination. The Environmental Permitting Regulations (EPR) are about preventing significant pollution from emissions from the Installation, emissions are substances released from the Installation whilst something exported in a controlled manner for subsequent use elsewhere is not considered an emission. The latter includes manure and litter removed as part of poultry house cleanouts. In addition, The River Wye SAC is more than 5km from the Installation boundary and screens out from further assessment of ammonia emissions from the Installation. Clean outs are controlled via minimisation of odour and ammonia emissions under the measures covered in the OMP. Contingency measures (i.e. for such times such as clean outs/litter removal) are covered in the

OMP. The permit will ensure compliance with the OMP, which would not be the case, should the Installation not have a permit.

2. Manure spreading/disposal – We have considered what is within our legal remit under EPR and specifically the emissions from the Installation. Please refer to Key Issues section 4.10 ‘Spreading of manure and wash water to agricultural land’ for an explanation of what is assessed under the EPR permit application determination, and the other regulations in place covering this issue. We have assessed emissions from the Installation and conclude that there will be no significant pollution at any habitat. We are satisfied we have complied with our legal duties. All manure is sold to a third-party. The land where manure/slurry may be stored, or spread is not part of the Installation. The Environmental Permitting Regulations (EPR) are about preventing significant pollution from emissions from the Installation. Emissions are substances released from the Installation whilst something exported in a controlled manner for subsequent use elsewhere is not considered an emission. Furthermore, BAT Conclusions 3 and 4 ([https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\\_.2017.043.01.0231.01.ENG&toc=OJ:L:2017:043:FULL](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.043.01.0231.01.ENG&toc=OJ:L:2017:043:FULL)) require the Operator to adopt a nutritional strategy to reduce the levels of N and P excretion and demonstrate they are meeting the BAT associated excretion levels given in table 1.1 and table 1.2 of the BAT conclusions document. The Applicant has confirmed they have checked the relevant levels and can comply with them. They will also be required to calculate or analyse manure and/or slurry to estimate N and P excretion and report this to the Environment Agency annually.
3. Human health - we have assessed the risks to human health from ammonia in Key Issues section 4.2 ‘Ammonia emissions – human receptors, and from dust and bioaerosols, and particulate matter in Key issues section 4.5 ‘Dust and bioaerosols’ above. Furthermore, we consulted with the UKHSA and they state that emissions will present a low risk to human health, assuming that the Installation will comply in all respects with the requirements of the permit, including the application of Best Available Techniques (BAT). The UKHSA has made this conclusion, having a general role in keeping up to date with relevant research and providing advice accordingly.
4. Traffic – consideration of increased traffic movements beyond the Installation boundary is outside the scope of our determination of the application.
5. Buildings – the Applicant has confirmed that the poultry housing will meet the requirements of ‘How to Comply with your Environmental Permit for Intensive Farming’ EPR 6.09 (version 2) and the BAT conclusions, and we have no reason to dispute this. The Installation infrastructure will be checked as part of compliance visits by the EA site inspector and any concerns raised will need to be addressed by the Operator.

We are satisfied the permit includes robust measures to protect human health and the environment in relation to the matters we can control under the permit.

Response received from
Herefordshire Wildlife Trust (received 13/06/2022)
Brief summary of issues raised
We are concerned about the impact of the proposed move to over 200,000 broilers on this site and the effect it will have on the local environment. The site lies metres from the River Arrow which is a tributary of the River Lugg, a Special Area of Conservation (SAC). The River Lugg is currently failing targets to keep average phosphate levels below the required 0.05mg/l. An update to the River Wye Nutrient Management Plan (NMP) is currently being drafted by regulatory bodies outlining measures being developed independently to improve

phosphate reduction. It is hoped that the new plan and actions therein will provide greater certainty on phosphate reduction. In lieu of this, the position held by Herefordshire Council is; 'that on Natural England's advice, there remains potential for a positive appropriate assessment, where it can be demonstrated that development is nutrient neutral or would lead to betterment to enable development to proceed. Proposals will need to provide appropriate evidence of avoidance/mitigation measures'.

This development therefore needs to demonstrate neutrality or betterment. We are concerned that adequate mitigations have not been put in place to prevent increased pollutants entering the water courses. The proposal states that clean surface water will drain directly into the River Arrow but it is unclear how this will be monitored to ensure that the water entering the river is clean.

The wash water is due to be held in onsite storage facilities before being moved off site. Given the increase in numbers there is no clear information to demonstrate that the facilities will be able to cope with the increase in waste.

The disposal of the litter is due to be managed by:  
'At depletion the litter will be removed from the site and used on operator controlled land with any surplus sold.'

It is unclear where this land would be and how much surplus there would be. Recent research suggests that for many years the land in the Wye catchment has received an excess of phosphates from multiple sources and exceeds crop/grass demand. The extra tonnes of chicken manure that this development will generate will inevitably be spread on land within the catchment and exacerbate the phosphate surplus. This will contribute to the phosphate levels in catchment watercourses (many of which are already in poor ecological status due to high phosphate) where it will have an adverse effect on aquatic biodiversity and the statutory designated site of the River Wye (SAC).

Finally on the 'Not Duly made' letter dated 29 March 2022 it is noted that:  
'Along with the pre-application report issued on 02/06/2021, we also attached a checklist to this report which enabled you to send to the local authority ecological team, local wildlife trust or local forestry commission to ask for further information about local wildlife sites or ancient woodland which required modelling. The checklist included questions about the LWS or ancient woodland to establish their sensitivity and relevance for inclusion within the impact assessment from ammonia emissions. Was this done? If so, please provide any information that was obtained.'

In the 'Not Duly made response' dated 30 March 2022 the response to this question was n/a. We would like to note that the River Arrow is a Local Wildlife Site and the site lies within 100m of this site. Additionally a further Local Wildlife Site is located within 200m, at SO27365495 and an ancient woodland site at SO2726554754 within 200m of the site.

#### Summary of actions taken or show how this has been covered

With regard to site drainage, please see Key issues section 4.6 'Site drainage' for our assessment of this issue. We are satisfied that the measures in place will prevent contaminated drainage discharging to the River Arrow.

Regarding dirty water storage, the Applicant has confirmed that they have adequate storage to contain all dirty water prior to exporting from the Installation. Wash water (slurry) will be spread on land owned by the Operator in accordance with a Manure Management Plan and NVZ rules, which is a requirement of 'How to Comply with your Environmental Permit for Intensive Farming' EPR 6.09 (version 2). There will be a need to undertake analysis of the manure/slurry, undertake nutrient analysis of the receiving soil and keep appropriate records e.g. what was spread, application date, application rates, and that total nitrogen supplied doesn't exceed 250kg/ha on any field in any 12-month period – it is this information, amongst other issues, which is examined during compliance visits of the Installation. The Operator will also have to adhere to the Reduction and Prevention of

Agricultural Diffuse Pollution (England) Regulations 2018 (Farming Rules for Water). There is also a contingency plan in place to remove dirty water from the Installation by a contractor, should the need arise, as evidenced in the Odour Management Plan.

There is an outlet to the River Arrow, via settlement chambers/sediment traps, which receives clean yard water (excluding all times yards are contaminated e.g. catching, mucking out or washing, when water from the yard drains to the underground dirty water tanks). During clean out operations a diverter valve is used to channel yard surface water to the wash water collection tanks (and does not contaminate the River Arrow) for exporting off site. Soakaways are also present on site. As 'How to Comply' makes clear, these are appropriate measures to collect and control site drainage in order to prevent pollution. These ensure that there are no untreated point source emissions directly into surface water. Furthermore, the collection tanks, which receive drainage from the housing during clean out, are built to conform to specifications in EPR 6.09 'How to comply with your environmental permit for intensive farming', and specifically to meet the requirements of The Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010 (as amended 2013). All wash water inside the poultry houses goes straight into the dirty water drainage system and on to the dirty water collection tanks.

These appropriate measures should ensure that the Installation does not impact the River Arrow, the River Lugg, or the River Wye through pollutants or nutrients entering the water courses.

Please refer to Key Issues section 4.10 'Spreading of manure and wash water to agricultural land' for an explanation of what is assessed under the EPR permit determination, and the other regulations in place covering this issue.

The Applicant did not consult the local authority ecological team, local wildlife trust or local forestry commission regarding information about the local wildlife sites and ancient woodlands nearby. However, as part of our ammonia assessment we determined that only the River Arrow LWS would be possibly impacted over our relevant thresholds and consulted the relevant bodies, and concluded that, whilst the site was not actively managed and there were no conservation objectives in place, we included it our ammonia assessment. Please see Key Issues section 4.1 'Ammonia Emissions – ecological receptors' for further details and our conclusions linked to installation impacts on the River Arrow LWS.

Response received from
Sustainable Food Knighton (received 13/06/2022)
Brief summary of issues raised
The site is within the catchment of the River Wye Special Area of Conservation (SAC), which is suffering from an excess of nutrients contributing to eutrophication and the severe algal blooms. These excess nutrients in ammonia and nitrates present in chicken excrement are disastrous for native wildlife and speed the loss of precious biodiversity.
I note that the applicant has not applied for planning permission, which is disturbing this is a major development which will have a huge impact on the area.
Summary of actions taken or show how this has been covered
Please refer to Key issues section 4.10 'Spreading of manure and wash water to agricultural land' for an explanation of what is assessed in the EPR permit determination and the other regulations in place which cover this issue.

Planning permission is not required for an EPR permit to be granted, whether or not they need planning permission is matter for the local planning authority – if they do, they will require both in order to operate.

Response received from

Woodland Trust (received 14/06/2022)

Brief summary of issues raised

Nitrogen pollution is one of the most significant and immediate threats to ancient woodlands and other semi-natural ecosystems in the UK. Levels of atmospheric ammonia and nitrogen deposition are negatively affecting habitats where important biodiversity has developed through historically low atmospheric levels of reactive nitrogen, resulting in a deterioration of their ecological integrity. This is leading to direct loss of species, but there is also a growing evidence-base revealing wider impacts on ecosystem functioning and resilience. This includes loss of soil fungi that trees depend upon (ectomycorrhizae), resulting in increased susceptibility to stress from climate and tree diseases. In 2014, 96% of the area of nitrogen-sensitive habitat in England received more nitrogen than it could cope with effectively.

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/729646/code-good-agricultural-practice-ammonia.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/729646/code-good-agricultural-practice-ammonia.pdf)

The Trust acknowledges that the thresholds for ancient woodland are set by the Environment Agency at a process contribution (PC) of 100%; however, this threshold accepts deterioration of ancient woodland habitat and therefore is not in line with National Planning Policy Framework (NPPF), paragraph 180c, which states: “development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists”.

We remain concerned about the Environment Agency’s use of a 100% PC to ancient woodlands when considering permitting applications, and its use within the decision-making of planning authorities across England and Wales for all intensive livestock and poultry developments that do not require environmental permitting (e.g. <40,000 bird poultry developments). We would welcome further opportunities to discuss this with the Environment Agency.

We believe that an application must be able to demonstrate that any resulting increase in the levels of ammonia and nitrogen deposition will be insignificant (<1% of the critical level and load) at all ancient woodland sites. We refer you to the Trust’s Technical Advice Note (2019) on ammonia pollution

<https://www.woodlandtrust.org.uk/publications/2019/04/ammonia-impacts-on-ancient-woodland/>). We have reviewed the ammonia modelling report and the critical level and loads detailed for the various ancient woodland receptor points. We note that the report models a reduction in ammonia process contribution of this application when compared with the existing units. However, we still hold concerns with respect to the predicted process contribution that this re-development will pose and the continued adverse impact and long-term deterioration of nearby ancient woods.

We would appreciate clarification as to what additional mitigation measures have been considered to further reduce the ammonia emissions from the new buildings, such as the use of ammonia scrubbing technology. It is not clear whether the applicant has taken every possible measure to further reduce the ammonia emissions from the proposed development and therefore reduce the ammonia pollution and nitrogen deposition that are currently leading to deterioration of nearby areas of ancient woodland (contrary to paragraph 180 of the National Planning Policy Framework).

To conclude, the Woodland Trust is of the opinion that the proposed permit will continue to allow for the deterioration of a number of ancient woodland sites from predicted ammonia and nitrogen pollution associated with this poultry farm application.

Summary of actions taken or show how this has been covered

Please refer to Key Issues section 4.1 'Ammonia emissions – ecological receptors, for the assessment carried out. In conclusion the proposal to change from a turkey to a broiler operation will result in an overall reduction of ammonia emissions on the nature conservation sites and hence a beneficial impact linked to new broiler Installation. A review of the detailed modelling provided outlined in section 4.1 concludes that the process contributions of ammonia, nitrogen and acid are below 100% of the relevant critical level (CLE) or critical load (CLo) for all Ancient Woodlands. We are satisfied that the operations incorporate best available techniques (BAT) and have verified accuracy of the reduction levels stated in their modelling reports. We do not require the Applicant to put enhanced BAT measures to reduce emissions further (such as ammonia scrubbing technology). If we refuse the permit, the Applicant may continue to operate a below EPR threshold turkey operation with the resultant higher impacts. The Operator has the potential to stock up to 40,000 turkeys at any time, without requiring an environmental permit.

The National Planning Policy Framework is a planning document and not directly relevant to our determination.

Whilst we have considered the Trust's technical advice note we are satisfied with our approach and that there will be no significant pollution of the environment.

## **2) Consultation Responses from Members of the Public**

The consultation responses received were wide ranging and a number of the issues raised were outside the Environment Agency's remit in reaching its permitting decisions. Specifically, questions were raised which fall within the jurisdiction of the planning system, both on the development of planning policy and the grant of planning permission.

Guidance on the interaction between planning and pollution control is given in the National Planning Policy Framework. It says that the planning and pollution control systems are separate but complementary. We are only able to take into account those issues which fall within the scope of our regulatory powers.

### **a) Representations from Individual Members of the Public**

Over 70 responses were received from individual members of the public. These raised many of the same issues as previously addressed. Only those issues additional to those already considered are listed below:



Brief summary of issue raised	Summary of actions taken or show how this has been covered
<p><b><u>Odour</u></b></p> <p>1. Concerns have been raised over the control of odour when the doors are opened and birds are being removed, when the cleaning process begins, and that the pollution will be at its worst during the clean out cycles.</p> <p>2. No computer modelling has been carried out to determine odour emissions from the farm, including allowing for the cleaning out of the sheds and manure being loaded onto vehicles.</p> <p>3. Concern that the physical and mental health of children and adults will be compromised from having to stay indoors as a result of odour pollution coming from the ventilation systems.</p> <p>4. The current unpermitted farm stocking turkeys already causes odour pollution, and a broiler farm will be worse because of the increase in poultry cycles and the subsequent cleaning out, manure removal and so on.</p> <p>5. Concern about the independence of the sniff tester referred to in the OMP.</p>	<p>1. As discussed in section 4.3 of this document, 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 from the Installation will not pose an unacceptable risk of pollution to the environment or harm to human health. The assessment completed has taken into account cleaning out operations. The Odour Management Plan (OMP) has considered house clean out and washing operations on site, for example. This revised OMP 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', our Top Tips Guidance and the 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.</p> <p>2. Odour modelling for the intensive farming sector has high uncertainties associated with it. These uncertainties increase when considering receptors nearby to the site. This is due to a number of factors including the peak to mean ratio for odour concentrations being high for this sector, making assessment against benchmark values more difficult. These modelling uncertainties make predictions made by the model unreliable for permitting decisions. We consider that the high uncertainties associated with odour modelling at intensive farms mean this is not a suitable basis for permitting decisions. Therefore, where there are receptors in close proximity (i.e., within 400m of the Installation boundary) to the Installation, the Applicant is required to produce an odour management plan (OMP). For details of the OMP please see section 4.3 of this document.</p> <p>3. As discussed in section 4.3 of this document, the Environment Agency is satisfied following a review of the information provided by the Applicant, and the conditions present within the Permit, that emissions (including odour) from the Installation will not cause significant pollution of the environment or harm to human health. Current operations are not regulated by the Environment Agency and if a permit is granted the Operator will be utilising appropriate measures which they can be held to via conditions included within the environmental permit. UKHSA were consulted as part of our consultation exercise and concluded that compliance in all respects with the requirements of the permit, including the application of Best Available Techniques (BAT) will present a low risk to local human health receptors. As such, we do not consider it will be necessary to stay indoors and so do not consider health will be impacted in the manner raised in the concern.</p> <p>4. The Local Authority Environmental Health Department were consulted as part of our consultation exercise and whilst they reported some instances of odour and noise occurrence since the permit application had been submitted, they did not report any other historic complaints regarding the site, and they concluded that there was no Statutory Nuisance. As discussed elsewhere in this document, we are satisfied that emissions of odour from the Installation will not pose an unacceptable risk of pollution to the environment or harm to human health.</p>

Brief summary of issue raised	Summary of actions taken or show how this has been covered
	<p>5. As the OMP states, monitoring is carried out weekly, by means of “sniff testing” at the monitoring points by persons not involved directly with the operations at the Installation. This is a stated operating technique within the OMP, and therefore we can enforce this through the appropriate permit condition. The Environment Agency can carry out our own monitoring, if we consider this to be appropriate.</p> <p>The site will be inspected on an on-going basis to ensure compliance. In the event that the Operator fails to comply with any Permit condition then we would take appropriate enforcement action in line with our Enforcement and Sanctions Guidance which can be viewed at <a href="https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy">Environment Agency enforcement and sanctions policy - GOV.UK (www.gov.uk)</a> (<a href="https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy">https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy</a>)</p>
<p><b>Noise</b></p> <p>1. Concern raised about noise pollution from the site including from ventilation fans, feed deliveries, the removal of birds at night, and the transport of the birds to and from the site.</p> <p>2. Concern about noise from the increase in vehicles envisioned with a change to broiler production.</p> <p>3. Lack of general consideration from the Applicant of noise impacts.</p>	<p>1, 2 &amp; 3. We consider that the NMP complies with the requirements of the guidance (see section 4.4 above). We are satisfied that the measures included in the NMP will be effective in preventing and where that is not practicable minimising the emission of noise, and this includes the operation of the fans, the delivery of feed, the removal of birds at night, and the transport of the birds within the Installation. The Operator will be required to operate the Installation in compliance with the NMP and is required to review the plan at least every year and if the Environment Agency has notified the Operator that operations are giving rise to noise pollution and make any appropriate changes to the NMP identified by the review. We therefore do not think that noise will be an issue for this Installation. As an additional step to ensure prevention of noise pollution from this Installation, the Operator will be required after 12 months of operation (which will be captured in IC2) or earlier if requested by the Environment Agency, to submit a report identifying any issues or substantiated complaints.</p> <p>In the unlikely event of substantiated complaints, the Operator will initiate a Noise Monitoring Survey, details of which have been provided with the application, and results required to be submitted along with a report summarising the findings and conclusions which are reached, to the EA for analysis and approval. This will be used to determine the source the noise and potential remedial actions which can be taken, should that be appropriate.</p> <p>Consideration of increased traffic movements beyond the Installation boundary is outside the scope of our determination of the Application.</p> <p>The Environment Agency is satisfied following a review of the information provided by the Applicant, and the conditions present within the Permit, that emissions (including noise) from the Installation will not cause significant pollution of the environment or harm to human health.</p> <p>The site will be inspected on an on-going basis to ensure compliance. In the event that the Operator fails to comply with any Permit condition then we would take appropriate enforcement action in line with our Enforcement and Sanctions Guidance which can be viewed at <a href="https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy">Environment Agency enforcement and sanctions policy - GOV.UK</a></p>

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	<p><a href="http://www.gov.uk">www.gov.uk</a>            (https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy)</p>
<p><b><u>Health</u></b></p> <p>1. Concerns have been raised as to the impact of the Installation from emissions of dust, bioaerosols, and other pollutants, on people with cystic fibrosis, asthma and other respiratory conditions such as COPD, particularly the impact on frail and elderly residents and children.</p> <p>2. Concern raised of the impact on health from odour pollution.</p> <p>3. Concern has been raised that there will be a risk to health from increased traffic movements to and from the site, associated with the development.</p> <p>4. Concern that activities as a result of the presence of the Installation will result in sleep deprivation, particularly with regards to activities that take place during the night.</p> <p>5. Concern has been raised about the risk from zoonotic diseases, including Avian flu, to the local residents.</p> <p>6. Concern has been raised that the treatment of people affected by this development will put a strain on the NHS.</p>	<p>1. The Health Protection Agency (now UKHSA) has stated (Position Statement, Intensive Farming 2006) that it is unlikely that ammonia emissions from a well-run and regulated farm would be sufficient to cause ill health.</p> <p>Whilst the potential adverse effects of ammonia include respiratory irritation and may also give rise to odour complaints, levels of ammonia in ambient air will decrease rapidly with distance from a source.</p> <p>To prevent significant emissions from the site the Operator has proposed appropriate measures to manage dust and bioaerosols - a bioaerosol risk assessment has been provided by the Operator, which incorporates dust as a potential risk from the site, 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. We have assessed these measures and have determined they represent best available techniques for this activity. These measures are stated operating techniques in a variety of documents provided by the Applicant and captured through condition 2.3 and Table S1.2 of the Permit. 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.</p> <p>Furthermore, as part of the consultation process, UKHSA and the Director of Public Health for Herefordshire County Council were consulted. Their consultation responses and our responses to those can be found in Annex 1, Section 1 of this document. UKHSA have not raised concerns linked to any specific medical conditions in the local community with regards to this Installation.</p> <p>2. As discussed in this document we are satisfied that there will be no significant pollution of the environment or harm human health from emissions such as dust, odour (Section 4.3), noise and ammonia. We have also consulted with UKHSA and the Director of Public Health on the Application and they have not raised any concerns (see Annex 1 section 1 above). UKHSA have stated that should the Installation comply in all respects with the requirements of the permit, including the application of Best Available Techniques (BAT), this should ensure that emissions present a low risk to human health.</p> <p>3. Consideration of increased traffic movements beyond the Installation boundary is outside the scope of our determination of the Application.</p>

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	<p>4. The risk of pollution posed by noise emissions from the site has been assessed as part of this determination and this includes an assessment of day and night-time operations. Based upon the information in the Application, the noise management plan (which includes restrictions on certain activities only occurring during the day and that appropriate measures are in place for operations (principally bird catching) that occur, infrequently, at night) and the conditions of the Permit we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise noise and vibration and to prevent pollution from noise and vibration outside the Installation. Our assessment of noise is discussed in section 4.4 of this document.</p> <p>5. The birds will be kept indoors at all times so therefore it is extremely unlikely that birds within the houses will contract Avian flu. Effective biosecurity measures will also ensure that the likelihood of disease will be low. We have consulted the UK Health Security Agency (UKHSA) and the Director of Public Health on the Application in line with our guidance – their comments can be seen in Annex 1, Section 1, above. They have not raised any concerns with regards to zoonotic diseases. We are satisfied that the risk of pollution of the environment or harm to human health from the activities of the site are not likely to be significant.</p> <p>6. Whilst not able to comment on matters relating to the budget of the NHS, as discussed earlier in this document we are satisfied that there will not be significant pollution of the environment or harm to human health from the activities of the site so there will not be any impact on the NHS.</p>
<p><b><u>Carcass management</u></b></p> <p>Concern has been raised on the procedure for the handling, storage and removal of dead birds.</p>	<p>Based on the information in the Application we are satisfied that appropriate measures will be in place to manage waste (including fallen stock) so as not to result in significant pollution.</p> <p>The Applicant has confirmed that any fallen stock within the houses will be collected and recorded daily. These will be stored in a locked freezer on site prior to disposal and then removed by a licenced individual twice a month – these will be disposed of in accordance with the Animal By-Products Regulations (as per the requirements of S3.2 of EPR 6.09 ‘How to Comply with your environmental permit for intensive farming’, version 2).</p> <p>The aforementioned operating techniques are captured within the Odour Management Plan (OMP) and Technical Standards provided with the application. The OMP and Technical Standards are stated operating techniques, which the Applicant must comply with by virtue of Table S1.2 and condition 2.3 of the Permit.</p>
<p><b><u>Dust/bioaerosols</u></b></p> <p>Concern has been raised about the risk of PM2.5 and PM10s emanating from the site.</p>	<p>As discussed in section 4.5 above, with regards to particulate matter, our approach to dust and bioaerosol environmental control (to require a dust and bioaerosol management plan for intensive farming installations with receptors within 100 metres of the Installation boundary) will reduce total overall dust levels which will subsequently reduce PM10 and PM2.5 particle size dust, with most of the measures focusing on reducing creation of dust at source. This is an</p>

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	<p>agreed approach with former Public Health England (now UKHSA) and ourselves.</p> <p>As discussed in Section 4.5 of this document, the Environment Agency is satisfied, following a review of information provided by the Applicant, that the proposals for managing and mitigating dust are BAT. EPR 6.09 'How to Comply with your environmental permit for intensive farming', version 2 explains that dust generation may be controlled within the house through the management of the litter and air quality, and the Operator has stated that excessively dry litter is prevented through the use of a computer controlled internal environment controlling the humidity. The litter also comprises of dust-extracted shavings. This will reduce dust emissions at source and reduce atmospheric emissions. Furthermore, the Operator will use high velocity roof mounted fans which effectively disperse emissions into the atmosphere reducing their concentration and impact and is considered to be BAT.</p> <p>The intensive farming sector Best Available Techniques (BAT) Reference Document, BREF (<a href="http://eippcb.jrc.ec.europa.eu/reference/BREF/IRPP/JRC107189_IR_PP_Bref_2017_published.pdf">http://eippcb.jrc.ec.europa.eu/reference/BREF/IRPP/JRC107189_IR_PP_Bref_2017_published.pdf</a>), does not require us to set particulate matter (PM) limits. In addition to this, the impact assessed is considered acceptable, so we do not consider it necessary to set site specific emission limit values for particulates.</p> <p>Furthermore, we do not consider that emissions of dust are likely to be significant and therefore that the risk to human health from dust likely to be significant.</p> <p>The Permit includes condition 3.2 to control emissions of substances not controlled by emission limits. This includes dust. The Operator has to manage its activities so that these emissions shall not cause significant pollution. Moreover, condition 3.2.2 requires the Operator – if notified by the Environment Agency that the activities are giving rise to pollution – to produce an emissions management plan.</p>
<p><b><u>Pests</u></b></p> <p>Concerns have been raised about the impact of pests (including flies and rats) on the people living in the vicinity of the Installation and that vermin will be attracted by the bulk storage of chicken feed and chicken waste products.</p>	<p>Based on the information in the Application we are satisfied that appropriate measures will be in place to prevent and/or minimise pests including flies. Section 4.7 of this document records in detail the measures proposed to prevent or minimise the presence of pests on site.</p> <p>The containment measures for feed are in line with section 3.2 of EPR 6.09 'How to Comply with your environmental permit for intensive farming', version 2. This will help ensure that pests are kept to a minimum.</p> <p>The Applicant has also proposed appropriate measures for carcass management. Fallen stock during the production cycle will be collected and recorded daily and will be placed into a locked freezer. The carcasses will be collected regularly by a licensed renderer under the National Fallen Stock Scheme. Records of dates, quantities and destination of the fallen stock will be held on site. This will ensure that pests are less likely to be attracted.</p> <p>Poultry manure will not normally be stored on site at any time and therefore this will help to ensure that pests are prevented or controlled. Contingency plans are in place for when it may be</p>

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	<p>necessary to store manure on site. For further details, see Section 4.3.2 of this document.</p> <p>Furthermore, there is also a generic pest condition within the permit: condition 3.6. This states that the activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. In the unlikely event that pests become an issue, condition 3.6.2 states that the Operator shall if notified by the Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution, hazard or annoyance from pests. This management plan should be implemented from the date of approval, unless otherwise agreed in writing by the Environment Agency.</p> <p>The Operator is also required to comply in all respects with the requirements of the Permit, all relevant legislation, and use Best Available Techniques (BAT). The site will be inspected to ensure compliance. In the event that the Operator fails to comply with any Permit condition then we would consider appropriate enforcement action in line with our Enforcement and Sanctions Guidance which can be viewed at <a href="https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy">Environment Agency enforcement and sanctions policy - GOV.UK (www.gov.uk)</a> (<a href="https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy">https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy</a>)</p>
<p><b><u>Traffic</u></b></p> <p>Concern has been raised on the increased levels of traffic movement on rural roads which are unsuitable for a high volume of traffic.</p>	<p>Offsite traffic movements are outside of our remit for the determination of the Application.</p> <p>On-site noise, including that generated by traffic is relevant to our determination and has been considered elsewhere in this document (Key Issues, section 4.4).</p> <p>The Environment Agency is satisfied that on-site traffic will not give rise to significant pollution of the environment or harm to human health.</p>
<p><b><u>Monitoring</u></b></p> <p>Concerns have been raised as to the effectiveness of monitoring the actions of the Installation.</p>	<p>The Installation will be inspected by the Environment Agency to ensure compliance and this can include both announced and unannounced visits and the frequency of inspection can increase if we consider that is necessary. Compliance with the Permit will be monitored by the Environment Agency's local Environment Management team. The Operator is required to comply with the Permit conditions. Any breach in Permit conditions is an offence and would be subject to appropriate enforcement action in accordance with the Environment Agency's Enforcement and Sanctions Guidance. In the event that the Operator fails to comply with any Permit condition then we would consider appropriate enforcement action in line with our Enforcement and Sanctions Guidance which can be viewed at <a href="https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy">Environment Agency enforcement and sanctions policy - GOV.UK (www.gov.uk)</a> (<a href="https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy">https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy</a>)</p>

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	<p>enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy).</p> <p>Compliance Assessment Reports are produced following routine Environment Agency inspections which are put on the public register.</p> <p>All information that the Environment Agency obtains as a result of our own monitoring, information obtained as a result of monitoring required under a permit condition or as a result of a notice served under regulation 61 of the Permitting Regulations in relation to monitoring, must be put on our public register.</p>
<p><b><u>Site Location</u></b></p> <p>Concerns have been raised about the location including proximity to housing.</p>	<p>Scale, visual impact, location and land use is a matter for consideration during the planning process where planning permission is required. Location is relevant for permitting but only in so far as its potential to have an adverse impact on sensitive receptors. The environmental impact has been assessed and it is not considered that it will give rise to significant pollution of the environment or harm to human health.</p>
<p><b><u>Density of poultry farms in the area</u></b></p> <p>1. Concerns have been raised about the number of poultry farms in the area and that planning have already allowed too many.</p> <p>2. The cumulative effect of all of the local farms should be examined and this farm should not be considered in isolation.</p> <p>3. It has been stated that planning (or permission for change of use) should be required for the change in poultry production from the relevant planning authority.</p>	<p>1 &amp; 2. The density of farms within a given area is not normally a relevant consideration under the Environmental Permitting Regulations unless our risk assessment process requires an in-combination ammonia assessment; in this circumstance this was not required. Where planning permission is required the local planning authority is responsible for determining land use. The Environment Agency considers the in-combination effects for other nearby EPR intensive farms if the predicted ammonia emissions from the Installation for Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsars and Sites of Special Scientific Interest (SSSI) exceed relevant thresholds. Emissions from this Installation do not exceed the relevant thresholds (Please see 'Ammonia Emissions – Ecological Receptors' section 4.1 of Key Issues for more information). It is important to note that it is not a legal requirement to carry out in-combination assessments for Local Wildlife Sites (LWS)/Ancient Woodland (AW).</p> <p>We have audited the ammonia modelling and assessed the ammonia impacts in Key Issues sections 4.1 and 4.2 above. In summary, we conclude that there will be no significant pollution at any habitat and that the proposed broiler activity will have less of an impact than the existing operations that do not require a permit.</p> <p>3. Our decision is independent of any planning permission application and decision; however, the Operator will require the appropriate planning permission to be in place if applicable. We are unable to instruct operators when to submit an environmental permit application, nor are we able to insist that applicants submit an environmental permit application and planning application in tandem. This does not form part of the Environmental Permit decision making process.</p>
<p><b><u>Impact on tourism / local businesses</u></b></p>	<p>Consideration of the impact of the Installation in relation to the tourism and leisure activities is primarily a matter for the local planning authority when determining any planning application. However, the Permit will regulate emissions such that there will be no</p>

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<p>Concerns have been raised that the area is attractive to tourists and for recreational activities and that this is at risk, due emissions deterring visitors to the area, if this Permit was to go allowed.</p>	<p>unacceptable levels of pollution from the Installation. We therefore do not consider that emissions from the Installation would affect tourism and leisure activities.</p>
<p><b><u>Animal welfare</u></b></p> <p>Concerns raised about animal welfare.</p>	<p>Animal welfare is not an issue under the Environment Agency's remit. It does not form part of the Permit decision making process. The Environment Agency is responsible for ensuring that the activities at the Installation do not have an unacceptable impact on the environment or human health.</p> <p>The principal regulator for animal health is the Animal and Plant Health Agency (APHA), whose main purpose is to safeguard animal and plant health for the benefit of people, the environment and the economy.</p>
<p><b><u>Current operations of the farm</u></b></p> <p>1. Concerns have been raised about the current operations of the farm, with reports of existing noise and odour pollution along with a pest problem.</p> <p>2. The site has been a turkey farm for a considerable amount of time and the new proposal contains no analysis of the historical impact (for example, from phosphates) of the farm on the local environment.</p>	<p>1. The Installation does not currently have an Environmental Permit and therefore is not currently regulated by the Environment Agency. Bringing the Operator into regulation will enable a greater degree of control of the activities of the Installation, than currently exists. We have not assessed and cannot comment on past management techniques, but we have assessed those proposed for future operations if a permit is granted and we are satisfied with them.</p> <p>The local authority was consulted and although there appears to be some previous instances of odour and noise occurrence, their conclusion was that there was no Statutory Nuisance. Our assessment of the application has examined odour and noise pollution and our conclusions can be read elsewhere in this document. We have also not received any information from the local authority to suggest that there is a pest problem at the farm.</p> <p>The Operator is required to comply in all respects with the requirements of the Permit, all relevant legislation, and use Best Available Techniques (BAT). The site will be inspected to ensure compliance. In the event that the Operator fails to comply with any Permit condition then we would consider appropriate enforcement action in line with our Enforcement and Sanctions Guidance which can be viewed at <a href="https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy">Environment Agency enforcement and sanctions policy - GOV.UK (www.gov.uk)</a> (<a href="https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy">https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy</a>).</p> <p>2. We have a duty to assess what the Applicant has applied for. The Environment Agency is satisfied, following a review of the information provided by the Applicant and the conditions present within the Permit, that emissions (including odour and noise) from the Installation will not cause significant pollution of the environment or harm to human health.</p>



<b>Brief summary of issue raised</b>	<b>Summary of actions taken or show how this has been covered</b>
<p><b><u>Increased clean outs</u></b></p> <p>Concerns that there will be a doubling of clean outs compared to current operations and that this will lead to increased disruption and pollution.</p>	<p>The shorter cycle of broilers compared to turkeys will result in an increase in clean outs required. However, we have taken this into account in our assessment, and we are satisfied, following a review of the information provided by the Applicant (including information provided in the OMP, covering the risks of cleanout) and the conditions present within the Permit, that emissions from the Installation will not cause significant pollution of the environment or harm to human health.</p>
<p><b><u>Inaccuracy of application documentation</u></b></p> <p>1. Claims that the computer modelling for ammonia emissions is based on out-of-date data and that emissions would be much higher than stated within the application and there would be a deterioration in air quality.</p> <p>2. Claims that there will be an increase in airborne pollution due to the increased number of cycles of clearing out of sheds and that this is when emissions, including noise and odour, occur.</p> <p>3. Concerns that within some of the application documentation, the Applicant has incorrectly calculated the distance to some nearby receptors.</p> <p>4. No details have been provided as to how an emission reduction will be achieved given the age of the existing poultry houses</p>	<p>1. It's not clear on what basis the claim of the data being out of date is being made. The ammonia modelling provided by the Applicant has been audited in detail by our air quality modelling specialist team and our conclusions can be seen in section 4.1 of this document.</p> <p>2. We have assessed the application made to us which will include an increased number of cycles of clearing out of the sheds compared to the existing use and whether those proposals are acceptable. We have assessed the risks to human health from ammonia in Key Issues section 4.2 'Ammonia emissions – human receptors', and from dust and bioaerosols, and particulate matter in Key issues section 4.5 'Dust and bioaerosols' above our assessment of odour and noise is discussed in Key Issues sections 4.3 and 4.4 of this document.</p> <p>The Environment Agency is satisfied following a review of the information provided by the Applicant, and the conditions present within the Permit, that emissions. from the Installation will not cause significant pollution of the environment or harm to human health.</p> <p>3. During the determination of the application, revised documents were requested and have been provided, where distances to nearby receptors were, in some cases, changed. That being said our assessment has examined the distances to nearby habitat and residential receptors and has not necessarily assumed that that the distances quoted were accurate, and we have taken this into account in our assessment.</p> <p>4. Please see Section 4.1 of this document, which sets out our conclusions from this assessment in more detail. The basis for any emission reduction is based around the fact that the emission factor for a broiler is 0.034 kg NH3/animal place/year whereas the emission factor for a turkey is either 0.45 kg NH3/animal place/year (for male turkeys) or 0.23 kg NH3/animal place/year (for female turkeys). Detailed modelling provided by the Applicant has been audited by our air quality modelling specialist team and our conclusions can be seen in section 4.1 of this document.</p>
<p><b><u>Future expansion plans</u></b></p> <p>There was concern that additional activities may be undertaken in future.</p>	<p>If the Operator wishes to expand the site in future, including any increase in the number of birds, then they would need to submit a variation application to the Environment Agency for consideration. Any application received will be determined in accordance with the Environment Agency's duties and guidance applicable at the time. There are no plans as a result of this permit application to increase</p>

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	the footprint of the site from what it is currently. For example, there are no new poultry houses proposed as a result of this application. There are currently six poultry houses at the Installation and there will remain six poultry houses after the Permit is issued.
<p><b><u>Industrial scale/size of the development</u></b></p> <p>Concerns have been raised about the industrial nature and the size of the development.</p>	<p>Scale, location and type of development is a matter for consideration during the planning process and does not form part of the Permit decision.</p> <p>The Environment Agency is responsible for ensuring that the activities at the Installation do not have an unacceptable impact on the environment or human health.</p> <p>We are satisfied that the risk of activities at the Installation will not have an unacceptable impact on the environment or health of local residents.</p>
<p><b><u>Effect on house prices</u></b></p> <p>Concerns have been raised that the value of existing properties and land would be affected.</p>	<p>Depreciation of property and/or land prices is not an issue under the Agency's remit. The Agency is responsible for ensuring that its legislative obligations are met and that the activities at the Installation will not cause significant pollution of the environment or harm to human health.</p>
<p><b><u>The Environment Agency's handling of the application and decision-making process</u></b></p> <p>1. Concerns have been raised about the EA decision making process.</p> <p>2. The precautionary principle should be applied as there is no proof that there will be no harm to the environment to human health if the development goes ahead.</p> <p>3. Concerns have been raised that an A4 leaflet giving information about the application was posted through the doors of some Lower Hergest households, two days before the deadline for responses to the consultation was due. Furthermore, there were concerns that claims within this document were</p>	<p>1 &amp; 2. We are confident that our decision-making process has been fair, transparent and in accordance with relevant legal duties, including duties relating to environmental protection. We have sought the public's views on the Application as set out in section 2.2 of this document.</p> <p>The United Kingdom Interdepartmental Liaison Group on Risk Assessment (UK-ILGRA) state in their paper "The Precautionary Principle: Policy and Application" that the precautionary principle should be invoked when there is good reason to believe that harmful effects may occur and the level of scientific uncertainty and the consequences or likelihood of the risk is such that the best available scientific advice cannot assess the risk with sufficient confidence to inform decision making.</p> <p>The UKHSA state in their consultation response that the Operator complying with Best Available Techniques (BAT) should ensure that emissions from the Installation present a low risk to human health.</p> <p>We have carefully considered the information provided, including further information that we have sought and have assessed the likely impacts. We are satisfied that the Permit protects the environment and human health.</p> <p>3. It is unclear what leaflet is being referred to here. It is believed that the Applicant, independent of the Environment Agency, posted some information to some local properties giving information. The Environment Agency was neither responsible for the contents of this leaflet nor necessarily endorses any claims made. The Environment Agency fulfilled its obligations by advertising the application in line with our Public Participation Statement. The Application was advertised on the GOV.UK website from 16 May 2022– 14 June</p>

<b>Brief summary of issue raised</b>	<b>Summary of actions taken or show how this has been covered</b>
<p>inaccurate and misleading.</p> <p>4. Concerns that the Environment Agency will permit the farm despite there being exceedances at many habitat sites and this undermines the purpose of the EA to protect the environment because the idea of allowing a permit which is considered an emission reduction or betterment is flawed.</p>	<p>2022. In addition to this, the Environment Agency posted some basic information to local residents advertising the application and where to comment on the application on 13/05/2022, ahead of the consultation beginning on 16/05/2022.</p> <p>4. An assessment on the potential impacts from the Installation on nature conservation sites was carried out and Section 4.1 of this document sets out our conclusions from this assessment in more detail. We do not recognise that the issuing of this permit would undermine our purpose or that the decision is flawed.</p> <p>We conclude that process contributions are below the relevant thresholds of the critical level (CLe) or critical loads (CLo) at all habitats with the exception of the River Arrow LWS. For the River Arrow LWS further assessment was carried out and our detailed modelling review outlined in Section 4.1 of this document concludes that the process contributions of ammonia and acid are below 100% of the relevant critical level (CLe) or critical load (CLo). With regards to nitrogen deposition, for the majority of the area (99.3%) even for the worst-case woodland deposition, the process contribution is below 100% of the critical load, except for a negligible 0.7% of the total habitat.</p> <p>At the time of this determination the turkey farm is still operational to the level used to evaluate the baseline habitat assessment. It is reasonable to take this into consideration. Furthermore, the Operator has the potential to stock up to 40,000 turkeys (which is more than their average stocking density) at any time, without requiring an environmental permit. The proposed change to the farm activity will result in a net reduction in ammonia emissions. There is a reduction of more than 40% in process contributions of ammonia, acid and nitrogen deposition from the proposed broiler farm (when compared to the existing turkey farm) potentially resulting in environmental improvements. We conclude that there will be no significant pollution at any habitat and that the proposed broiler activity will have less of an impact than the existing operations which do not require a permit.</p>
<p><b><u>Compliance of permit conditions</u></b></p> <p>Concern has been raised as to how the site will be regulated and what will happen if the Permit is breached.</p>	<p>Compliance with the Permit will be monitored by the Environment Agency's local Environment Management team. Any breach in Permit conditions is an offence and would be subject to appropriate enforcement action in accordance with the Environment Agency Enforcement and Sanctions Guidance, which can be viewed at <a href="https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy">Environment Agency enforcement and sanctions policy - GOV.UK (www.gov.uk)</a> (<a href="https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy">https://www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-policy/environment-agency-enforcement-and-sanctions-policy</a>).</p>
<p><b><u>Extent of local opposition</u></b></p> <p>There is a high level of local opposition, and this should be considered in the determination of the Application.</p>	<p>The level of opposition is not itself relevant to our assessment and cannot be taken into account. We have to make our decision based on the environmental and health impacts of any proposal. We carefully considered all representations made on this basis and the Permit contains conditions to ensure that the activities at the Installation do not have an unacceptable impact on the local environment or human health.</p>

<b>Brief summary of issue raised</b>	<b>Summary of actions taken or show how this has been covered</b>
<p><b><u>General environmental concerns</u></b></p> <p>Concerns have been raised over a negative effect on local flora and fauna.</p>	<p>An assessment on the potential impacts from the Installation on nature conservation sites was carried out as part of our determination of the Application. Section 4.1 of this document sets out our conclusions from this assessment in more detail.</p>
<p><b><u>Free range</u></b></p> <p>Concerns that the broilers will be free range and will be allowed outside.</p>	<p>The broilers will be housed entirely within the 6 onsite poultry houses and will not be allowed outside.</p>
<p><b><u>Loss of amenity for residents</u></b></p> <p>Concerns have been raised regarding the loss of amenity to residents due to increased levels of odour, noise and traffic, reduced air quality and a detrimental effect on health.</p>	<p>Traffic movements off site are not a matter within our remit when determining the Application. Regarding odour, noise and air quality, we are satisfied following a review of the information provided by the Applicant, and the conditions present within the Permit, that on-site operations will not have a significant impact on the health or amenity of local residents.</p>

## Annex 2: responses to consultation on our minded to decision

In accordance with the Environment Agency's Public Participation Statement and RGN 6 for Determinations involving Sites High Public Interest, we have consulted on the draft permit and decision document that we were minded to issue for the Application. Copies of all consultation responses have been placed on the Environment Agency public register.

The draft decision was advertised on our website from 17 May 2024 – 18 June 2024. Additionally, we made available electronic copies of the draft decision and draft permit on the webpage. We also emailed the parties (where we had a valid email address) who had responded to the initial consultation to advise them of the minded-to consultation which was advertised on the government website.

A total of 6 responses were received: one response from a statutory body, the UK Health Security Agency (UKHSA), 3 from individual members of the public, one from Marches Planning & Environment on behalf of local residents and one from Fish Legal. All responses are considered below.

Please note some of the issues raised in these responses were the same as those raised during the initial public consultation stage for the Application. Where this is the case, the Environment Agency response provided in Annex 1 has not necessarily been repeated. Reference should therefore be made to Annex 1 in addition to responses below:

Response received from
UK Health Security Agency (UKHSA) (received 14/06/2024)
Brief summary of issues raised
<p>Noted that the main emissions of potential public health significance are emissions to air of bioaerosols, dust including particulate matter and ammonia. The applicant lists no residential receptors, which are not associated with the applicant, located within 100m to the rearing houses. The applicant includes detailed ammonia dispersion modelling, which demonstrates a reduction in process contribution to nearby ecological receptors under the proposed activities, although some exceedances are still likely on the River Arrow. However, modelling showed that the long-term ammonia EAL of 180 µg/m<sup>3</sup> is unlikely to be exceeded at nearby residential and commercial receptors. The applicant states that any foul water will be collected in tanks for off-site disposal. The applicant also provides measures that are intended to mitigate fugitive odour, dust and bioaerosol emissions. The application details olfactory testing for odour at the site boundary and has a complaints procedure in place.</p> <p>Based upon the submitted application, and providing it is well managed and maintained, the proposed installation is not considered to present any obvious cause for concern.</p> <p>Recommendations:</p> <ul style="list-style-type: none"> <li>• UKHSA did not identify any non-occupational, sensitive receptors within 100m.</li> <li>• Given that heat exchangers installation is not evidenced as a viable option for odour reduction, UKHSA support the decision of the EA to request alternative contingency plan, should the need to implement one arise.</li> <li>• Based on update notes it is assumed that all litter is to be sold to a third party with no spread on operator-controlled land. Nevertheless, some of the documents have not been updated to reflect that change (for example: Non-technical Summary).</li> </ul> <p>It is assumed by UKHSA that the installation will comply in all respects with the requirements of the permit, including the application of Best Available Techniques (BAT). This should ensure that emissions present a low risk to human health.</p> <p>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:</p>

<a href="http://webarchive.nationalarchives.gov.uk/20140714084352/http://www.hpa.org.uk/we">http://webarchive.nationalarchives.gov.uk/20140714084352/http://www.hpa.org.uk/we</a>
<b>Summary of actions taken or show how this has been covered</b>
<p>As summarised previously, the Environment Agency is satisfied, following a review of the information provided by the Applicant, and the conditions present within the Permit, that appropriate measures are in place to minimise the risk of pollution from the Installation. The Environment Agency is satisfied that on-site activities will not give rise to significant pollution of the environment or harm to human health.</p> <p>We confirm that the litter is to be sold to a third party with none spread on operator-controlled land; this was clarified in a revised Technical Standards received on 26/06/2023 and a revised Odour Management Plan received 28/06/2023, listed in table S1.2 of the permit. We have not found any other documents, aside from the revised Non-Technical Summary (received 10/08/2022), specifically mentioned by UKHSA which state otherwise. We have amended the wording in the permit table S1.2 to exclude any references to applying litter to land in the Non-Technical Summary and, so an update to the Non-Technical Summary is not required.</p>

<b>Response received from</b>
Member of public (received 12/06/2024)
<b>Brief summary of issues raised</b>
<p>Noted that the draft permit is premised on the theory that this new broiler enterprise will be less environmentally harmful than the present turkey operation. However, they see little or no evidence that this the case.</p> <p>In the following areas they discern no material changes that will lessen pollution –</p> <ol style="list-style-type: none"> <li>1. Odour management - the only material improvement appears to be (4.9) one heat exchanger on one of the units, placed there as an experiment Olfactory check by someone not directly involved in the broiler production. This does not sound sufficiently independent. In addition, such checks are inherently subjective.</li> <li>2. Noise management The statement 'Hergest Camp Farm has not been the subject of noise complaints' is manifestly untrue. Many complaints have been made to Herefordshire Council precisely about noise. The statement that the installation is screened by woodland and buildings has no relevance to noise pollution. Trees do not mitigate noise and the only buildings within the installation are precisely the ones creating the noise which is mainly the incessant whirring of fans.</li> <li>3. Disposal of manure There is no plan for the disposal of litter in a way that protects the environment. It is acknowledged that excess nutrients from chicken manure on fields within the Wye catchment accounts for 70% of the nutrient load in the waters of the Wye and its tributaries. The only details given by the applicant are that manure will be sold to a licensed third party.</li> </ol>
<b>Summary of actions taken or show how this has been covered</b>
<p>Please refer to the relevant Key Issues sections and Annex 1. Specifically:</p> <ol style="list-style-type: none"> <li>1. Odour – please refer to Key Issues section 4. 3 and Annex 1.</li> <li>2. Noise – there is no statement 'Hergest Camp Farm has not been the subject of noise complaints' within this document. In addition, we acknowledge complaints have been made but none have been substantiated. We have not included trees as a noise mitigation measure for this installation. However we have included an improvement condition (IC2) to review the noise management plan (NMP), and where the review concludes a revised NMP is appropriate, the Operator is required to submit an updated NMP and include within it any additional appropriate</li> </ol>

measures proposed, including for the further attenuation and/or management of noise and timescales for their implementation. Please refer to Key Issues section 4.4, 4.9 and Annex 1 for further details.

3. Disposal of manure- Please refer to section in Key Issues section 4.10 and Annex 1.

<b>Response received from</b>
Member of public (response received 29/05/2024)
<b>Brief summary of issues raised</b>
Comments opposing the expansion of the sheds and equipment, stating the noise and smell from the current setup is bad enough without having it increased. The water runoff into the River Arrow is a major issue. External generators will be another noise, they cannot sit in their garden due to the smell and flies. The noise from the fans is very loud.
<b>Summary of actions taken or show how this has been covered</b>
The farm is not expanding; there are no new houses or extensions to existing poultry houses proposed. We did inadvertently refer to an expansion in section 4.7 but we have now corrected this. There will be the addition of a heat exchanger as per pre-operational condition PO1, however we have included improvement conditions IC1 and IC2 to review the odour and noise management plans – see Key Issues sections 4.3, 4.4 and 4.9. Site drainage, including outlets to the River Arrow, have been addressed in Key Issues section 4.6. There is one standby generator on site; this and the ventilation fans have been considered in Key issues section 4.4 for noise. Details received on 15/03/24, regarding the operation of the standby generator, confirmed that it would not be tested for more than 52 hours per annum (1 hour per week) and not operated for more than 500 hours per annum (averaged over 3 years), as backup for mains power interruption. Key Issues section 4.7 of this document records in detail the measures proposed to prevent or minimise the presence of pests (including flies) on site.

<b>Response received from</b>
Member of public (received 06/06/2024)
<b>Brief summary of issues raised</b>
It was claimed that the stench emanating from this farm is already unbearable at times.  In addition concerns were raised that we are trying to clean up the rivers and not contribute to their further pollution. But the overriding concern was the welfare of the birds.
<b>Summary of actions taken or show how this has been covered</b>
Our assessments for odour, noise, site drainage and spreading of manure and wash water to agricultural land have been detailed in the Key Issues section 4 above. Animal welfare is not within our remit for determining this permit application, please refer to the animal welfare section in Annex 1 section 2 above.

Response received from
Marches Planning & Environment on behalf of local residents (received 03/06/2024)
Brief summary of issues raised
Request for the Environment Agency to publish the Habitats Regulations Assessment for this permit application. Noted that the EA is relying on an assumption that the applicant would continue producing turkeys at the site should the permit not be granted. Request to provide the evidence for this assumption.
Summary of actions taken or show how this has been covered
The Environment Agency did not complete a Habitat Regulations Assessment as there are no Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites within 5km of the Installation boundary. Please see Key Issues section 4.1 for further details of our assessment, which discusses the potential impacts of ammonia from the Installation on designated nature conservation sites. The conclusion in section 4.1 above does not rely on the assumption that the Applicant will continue to produce turkeys but is primarily based on the impact of the broiler proposal. At the time of this determination, we have been advised that the Applicant is currently rearing turkeys and there is the potential for them to continue to do so in the future until the permit is operational, however we do not require evidence for this.

Response received from
Fish Legal (response received 18/06/2024)
Brief summary of issues raised
Fish Legal made previous submissions in response to an earlier consultation on this permit (EPR/BP3003MP).  The issues raised this time are as follows:
<b>1. Site drainage and point source discharges to River Arrow:</b>
They remain concerned about the risk of pollution to the nearby river Arrow from the outlet pipe that discharges directly into the river at NGR SO 27553 54792. They note that, what is referred to in the consultation documents as, "lightly contaminated water" (water contaminated during catching, mucking out or washing) is supposed to drain to underground dirty water tanks. However, there are manual controls for diverting this contaminated water away from discharging directly into the river via the outfall. Although the Agency appears to have satisfied itself that the manual nature of the controls to divert this contaminated water represents BAT, there remains an inherent risk of pollution from these point source discharges. They are surprised, therefore, that no emission limits have been specified for discharges from the outfall into the River Arrow in Table s3.2 as a precautionary measure.
<b>2. Relevant Water Framework Directive (WFD) regulation considerations:</b>
The consultation documents specify that the permit holder will be required to have their own manure management plan when spreading dirty wash water (slurry) on land owned or associated with them. That land is not identified in the consultation documents. It is not clear whether the WFD status of the relevant waterbody has been taken into consideration in relation to spreading on the Operator controlled land. For example, the 'Arrow – conf Gladestry Bk to conf Gilwern Bk waterbody' is currently failing to meet its environmental targets. The reasons for not achieving good ecological status include failures for phosphate linked to diffuse pollution from agricultural and rural land management, specifically poor nutrient management and poor livestock management.
They requested we disclose the location of the Operator's land on which spreading will take place and the waterbody specific measures that are currently in place for the 'Arrow –



conf Gladestry Bk to conf Gilwern Bk waterbody' to achieve good status. This request was made pursuant to the Environmental Information Regulations.

#### Summary of actions taken or show how this has been covered

Fish Legal's earlier response has been detailed in Annex 1 above.

#### 1. Site drainage and point source discharges to River Arrow:

It is common practice for farms to use a manual diverter valve to divert contaminated yard water and, as with other manual operations on site, relies on adequate training of staff and management plans with clear instructions in place. This will be checked during compliance inspections and we are satisfied that the risk is low and we do not require emission limits to be set in table S3.2 as it states that only uncontaminated water (by excluding all times yard is contaminated e.g. catching, mucking out or washing, when water from the yard drains to the underground dirty water tanks) is permitted and also this has an additional measure of draining via sediment traps and/or a sediment pit. Adding an emission limit will not in itself reduce the risk of a diverter valve accidentally being left open, and we do not permit discharges of contaminated water from intensive farm installations. The operation of the diverter valve is included in document reference 'Washing operations for Hergest Camp Farm' received 10/08/2022 and listed in table S1.2 Operating Techniques of the permit. This document forms part of the management plans for operations at the installation and requires all bungs/diverters are set to dirty water containment by the site manager/deputy prior to washing operations. The document will be reviewed during compliance inspections.

#### 2. Relevant Water Framework Directive (WFD) regulation considerations:

We had considered these Regulations and have included an additional section above, 5.2.11 Water Environment (Water Framework Directive) Regulations 2017, to explain this consideration.

The section 5.2.11 of this decision document outlines our reasoning why the good status of the relevant water course will not be impacted by this installation.

Further specific permit conditions are in place to ensure we have sufficient powers as the Regulator to ensure the Operator complies with their stated operating techniques as follows:

- Permit conditions under section 3.2 "Emissions of substances not controlled by emission limits" and specifically permit conditions 3.2.1 and 3.2.2
- Permit condition 2.3.5 linked to Operator responsibility for disposal or recovery of solid manure or slurry in a way minimising pollution

In addition, we responded to the Environmental Information Regulations request, and we replicate sections of the response sent out on 12/07/24 below for information:

#### Information Held:

#### The 'Arrow – conf Gladestry Bk to conf Gilwern Bk waterbody

The government website for the 2019 waterbody classification stated that the overall classification was moderate due to the phosphate measurements. However, the 2022 interim waterbody classification updated this as phosphates changed to a good sub-classification and fish monitoring data changed the overall classification to moderate (due to a lack of Atlantic Salmon). The change in classification is shown on the government website at: [Arrow - conf Gladestry Bk to conf Gilwern Bk | Catchment Data Explorer | Catchment Data Explorer](#)

We do not have any waterbody specific measures in place for the waterbody to achieve an overall good status, however in cycle 2 of the river basin management Plan (2016-2022) generic measures were added to the waterbody.

Details of those generic measures are listed below. These are used as a steer to focus our farm inspections and may also be used by the Wye and Usk Foundation and the Herefordshire Rural Hub partners for their improvement actions in the catchment.

## **Generic Measures**

### **Agriculture Livestock Generic Action**

Engage with the farming community - livestock - Manage livestock so they do not freely access watercourses by fencing off rivers and streams. If a mains source for drinking water cannot be secured install discrete drinking bays. Where access to watercourses is necessary, access points for drinking or fording should be constructed to minimise poaching. Improvement in land management particularly areas of livestock access and poaching. Encourage participation in environmental stewardship and the Catchment Sensitive Farming Scheme and provide advice and guidance to the farming community to encourage change. Implement improvements to reduce diffuse pollution (fencing and drinker and access). Address infrastructure issues on livestock farms to prevent runoff from yard areas. Engage with the farming community to manage soils in a sustainable way by testing soils for acidity (pH) and key nutrients every 3-5 years. Minimise activities that may cause soil compaction (e.g. cultivation in inappropriate ground conditions, in-field feeding and drinking points).

### **Agriculture Nutrient Management Generic Action**

Engage with the farming community - nutrient management - Manures and slurry should be stored in line with regulatory requirements, stores should be inspected annually to assess structural integrity and clean and dirty water should be separated wherever possible. Engage with the farming community to manage nutrients well. The spreading of manures should be informed by the use of manure and nutrient management plans. Walkover and improvement in land management through advice and guidance to the farming community. Ensure effective 'policing' of SSAFO and NVZ Regulations requirements.