

1

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Newcome-Baker Farms Limited

Whin Close Poultry Farm Docking Road Sedgeford Hunstanton Norfolk PE36 5LL

Permit number

EPR/AP3439DZ

Whin Close Poultry Farm Permit number EPR/AP3439DZ

Introductory note

This introductory note does not form a part of the notice.

The main features of the permit are as follows.

Whin Close Poultry Farm is situated approximately 1.5 kilometres east of the village of Sedgeford in Norfolk. The installation is approximately centred on National Grid Reference TF 73051 36280.

The installation is operated by Newcome-Baker Farms Limited and comprises four poultry houses, numbered one to four, which operate with a capacity of 168,000 broiler places designed for the rearing of chicken for meat production. Chicks are brought in from hatchery at a day old and at 35 days a proportion of the birds are removed for slaughter, with the remaining birds reared for approximately 41-42 days, before being transported off site for processing.

All four poultry houses are ventilated by roof extraction fans with an emission point higher than 5.5 metres above ground level and an efflux speed at or greater than 11 metres per second, and side wall inlets. All houses also have gable end fans, although these are operated infrequently to maintain temperature, typically in the summer months. The houses are warmed by indirect heating in the form of modern thermostatically controlled hot water heaters fuelled by Liquid Petroleum Gas (LPG).

At the end of the growing period, all birds are removed from the houses and the litter is exported off site and either spread on land owned by the operator or as a contingency, when there are limitations to spreading such as unsuitable weather conditions, transported to power stations for use as fuel. The empty houses are then washed and disinfected ready for the next crop. The wash water is channelled to an underground collection tank and subsequently the contents are exported off site and spread on land owned by the operator. Roof water from the poultry houses and yard surface water (excluding poultry house clean out periods) drain to French drains running along the sides of the houses acting both as soakaways and also as drainage pathways to a swale, located to the west of the poultry houses, acting as a soakaway at times of heavy rainfall. During clean out operations a diverter valve is used to channel yard surface water to the wash water collection tank for exporting off site.

The land around the site is used primarily for arable farming, although there are some wooded areas and meadows. The land rises gently towards hills to the north-east and falls towards the Heacham River valley to the south-west. Associated food is stored on the installation in silos adjacent to the poultry houses, positioned away from site traffic. Mortalities are collected daily and stored in a locked and sealed containers on site prior to removal and disposal in accordance with the Animal By-Product Regulations.

There are three Special Areas of Conservation (SACs), two Special Protection Areas (SPAs), and three Ramsar sites within 10km of the installation boundary. In addition there are three Sites of Special Scientific Interest (SSSIs) within 5km of the installation boundary. An assessment of the likely impact of the installation has been carried out. The installation is considered unlikely to have significant and/or damaging effects on these nature conservation sites.

This permit implements the requirements of the European Union Directive on Industrial Emissions.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit			
Description Date		Comments	
Application EPR/AP3439DZ/A001	Duly made 05/08/16	Application for an intensive farming poultry installation permit.	
Request for Further Information sent 15/08/16	Information received 26/08/16	Further details relating to noise modelling assessment.	
Schedule 5 notice issued 06/12/16	Response received 22/12/16	Clarification of site drainage, poultry house heating system, clean out procedures, standby generator, carcass disposal, on-site dwelling and receipt of Accident Management Plan, Dust Management Plan and revised Site Condition Report.	
Schedule 5 notice issued 27/03/17	Response received 31/03/17	Confirmation of compliance with the Best Available Techniques (BAT) Conclusion document dated 21/02/17, and receipt of a revised Odour Management Plan.	
Permit determined EPR/AP3439DZ (Billing reference: AP3439DZ)	13/07/17	Permit issued to Newcome-Baker Farms Limited.	

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/AP3439DZ

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Newcome-Baker Farms Limited ("the operator"),

whose registered office is

Wethered Manor Sedgeford Hunstanton Norfolk PE36 5LR

company registration number 00591983

to operate an installation at

Whin Close Poultry Farm Docking Road Sedgeford Hunstanton Norfolk PE36 5LL

to the extent authorised by and subject to the conditions of this permit.

Name	Date
SIMON HEWITT	13/07/2017

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
 - (a) 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
 - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of the permit.

1.2 Energy efficiency

- 1.2.1 The operator shall:
 - (a) take appropriate measures to ensure that energy is used efficiently in the activities; and
 - (b) maintain records of fuel and energy consumption used in the activities.

1.3 Efficient use of raw materials

- 1.3.1 The operator shall:
 - (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities; and
 - (b) maintain records of raw materials and water used in the activities.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

- 1.4.1 The operator shall take appropriate measures to ensure that the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities and that:
 - (a) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
 - (b) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

2 Operations

2.1 Permitted activities

2.1.1 The only activity authorised by the permit is the activity specified in schedule 1, table S1.1 (the "activities").

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 The operator shall maintain and implement a system to record the number of animal places and animal movements.
- 2.3.4 The operator shall ensure that a diet formulation and nutritional strategy is used to reduce the total nitrogen and total phosphorous excreted.
- 2.3.5 The operator shall take appropriate measures in disposal or recovery of solid manure or slurry to prevent, or where this is not practicable, to minimise pollution.
- 2.3.6 Any raw materials or fuels listed in schedule 2, table S2.1 shall conform to the specifications set out in that table.
- 2.3.7 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
 - (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points specified in schedule 3, tables S3.1 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

- 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.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

3.3.1 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.

3.4 Noise and vibration

3.4.1 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.

3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
 - (a) point source emissions specified in tables S3.1 and S3.2; and
 - (b) process monitoring specified in table S3.3.

- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

3.6 Pests

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

4 Information

4.1 Records

- 4.1.1 All records required to be made by schedules 3, 4 and 5 to this permit shall:
 - (a) be legible;
 - (b) be made as soon as reasonably practicable;
 - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
 - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) off-site environmental effects; and
 - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall maintain convenient access, in either electronic or hard copy, to the records, plans and management system required to be maintained by this permit.

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 For the following activities referenced in schedule 1, table S1.1 a report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
 - (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data; and
 - (b) the performance parameters set out in schedule 4, table S4.2 using the forms specified in table S4.3 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
 - (a) in respect of the parameters and emission points specified in schedule 4, table S4.1;
 - (b) for the reporting periods specified in schedule 4, table S4.1 and using the forms specified in schedule 4, table S4.3; and
 - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.3 Notifications

4.3.1 In the event:

- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately:
 - (i) inform the Environment Agency;
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident; and
 - (iii) take the measures necessary to prevent further possible incidents or accidents; and
- (b) of a breach of any permit condition the operator must immediately:
 - (i) inform the Environment Agency; and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time; and
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (c) any change in the operator's name or address; and
- (d) any steps taken with a view to the dissolution of the operator.

In any other case:

- (e) the death of any of the named operators (where the operator consists of more than one named individual);
- (f) any change in the operator's name(s) or address(es); and
- (g) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
 - (a) the Environment Agency shall be notified at least 14 days before making the change; and
 - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days' notice before implementation of any part of the site closure plan.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
 - (a) a decision by the Secretary of State not to re-certify the agreement;
 - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
 - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities			
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity	
Section 6.9 A(1)(a)(i) Rearing of poultry intensively in an installation with more than 40,000 places	The rearing of poultry in a facility with a capacity for 168,000 broiler places.	From receipt of birds, raw materials and fuels onto the site to removal of birds and associated wastes from site.	
Directly Associated Activity	Description of specified activity	Limits of specified activity	

Table S1.2 Operating ted	Table S1.2 Operating techniques			
Description	Parts	Date Received		
Application EPR/AP3439DZ/A001	Responses to application form B3.5 and referenced supporting documentation.	05/08/16		
	Responses to Not Duly Made Request for Further Information.			
Response to Schedule 5 Notice dated 06/12/16	Response to request for further information clarifying site drainage, poultry house heating system, clean out procedures, standby generator, carcass disposal, on-site dwelling and receipt of Accident Management Plan, Dust Management Plan and revised Site Condition Report.	22/12/16		
Response to Schedule 5 Notice dated 27/03/17	Response to request for further information regarding compliance with the Best Available Techniques (BAT) Conclusion document dated 21/02/17, and submission of a revised Odour Management Plan.	28/03/17		

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification

Schedule 3 – Emissions and monitoring

Table S3.1 Point source	Table S3.1 Point source emissions to air – emission limits and monitoring requirements					
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
High velocity roof fan outlets on poultry houses 1 – 4 as shown on the site plan in schedule 7	Poultry houses 1 - 4					
Gable end fan outlets on poultry houses 1 - 4 as shown on the site plan in schedule 7	Poultry houses 1 - 4					
Exhaust from standby generator as shown on the site plan in schedule 7	Standby Generator					
Vent from fuel tank as shown on the site plan in schedule 7	Diesel tank					

Table S3.2 Point Sour monitoring requireme		water (other	than sew	er) and land –	emission lim	its and
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
French drains running along sides of poultry houses 1 – 4 acing as soakaways, as indicated on the site drainage plan reference 'Appendix 2 05aii - Site Layout and Drainage Plan_RevB_28 07 16' in application EPR/AP3439DZ/A001	Roof water from poultry houses 1 – 4 and yard surface water (excluding poultry house wash out periods)					
Swale acting as a soakaway located to the west of poultry houses as indicated on the site drainage plan reference 'Appendix 2 05aii - Site Layout and Drainage Plan_RevB_28 07 16' in application EPR/AP3439DZ/A001	Roof water from poultry houses 1 – 4 and yard surface water (excluding poultry house wash out periods)					

Table S3.3 Process		1			0.1
Emission point reference or source or description of point of measurement	Parameter	Limit (incl. Unit)	Monitoring frequency	Monitoring standard or method	Other specifications
Broilers	kg N excreted/animal place/year	0.6 kg N/animal place/year	Annually	Using a mass balance of nitrogen based on the feed intake, dietary content of crude protein, and animal performance or Estimation by using manure analysis for total nitrogen content	
	kg P ₂ O ₅ excreted/animal place/year	0.25 kg P ₂ O ₅ animal place/year	Annually	Using a mass balance of phosphorus based on the feed intake, dietary content of crude protein, total phosphorus and animal performance or Estimation by using manure analysis for total phosphorus content	
Broilers	kg NH₃/animal place/year	0.08 kg NH₃/animal place/year	Annually	Estimation using emission factors	House numbers 1 - 4
Broilers	PM ₁₀ Dust	n/a	Annually	Estimation using emission factors	House numbers 1 - 4

Schedule 4 – Reporting

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Process monitoring Parameters as required by condition 3.5.1	-	Every 12 months	01 January

Table S4.2 Performance parameters			
Parameter	Frequency of assessment	Units	
Ammonia	Annually	kg NH ₃ /animal place/year	
Total Nitrogen excreted	Annually	kg N excreted/animal place/year	
Total Phosphorus excreted	Annually	kg P ₂ O ₅ excreted/animal place/year	
Dust	Annually	PM ₁₀ kg/year	

Table S4.3 Reporting for	Table S4.3 Reporting forms		
Media/parameter	Media/parameter Reporting format Da		
kg NH₃/animal place/year	Form Air 1 or other form as agreed in writing by the Environment Agency	13/07/17	
kg N excreted/animal place/year & kg P ₂ O ₅ excreted/animal place/year	Form N&P Excretion 1 or other form as agreed in writing by the Environment Agency	13/07/17	
Dust atmospheric mass emission	Form Dust or other form as agreed in writing by the Environment Agency	13/07/17	

Schedule 5 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number

Name of operator	
Location of Facility	
Time and date of the detection	
	ny malfunction, breakdown or failure of equipment or techniques, nce not controlled by an emission limit which has caused, is pollution
To be notified within 24 hours of o	detection
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	
(b) Notification requirements for t	he breach of a limit

Parameter(s)

Limit

To be notified within 24 hours of detection

Emission point reference/ source

Measured value and uncertainty

(b) Notification requirements for	the breach of a li	mit	
To be notified within 24 hours of	detection		
Date and time of monitoring			
Measures taken, or intended to be taken, to stop the emission			
Time periods for notification follo	wing detection c	of a breach of a limit	
Parameter			Notification period
(a) Natification requirements for	the detection of (any cignificant adverse o	unvironmental offect
(c) Notification requirements for to be notified within 24 hours of		any significant adverse e	environmental effect
Description of where the effect on	detection		
the environment was detected			
Substances(s) detected			
Concentrations of substances detected			
Date of monitoring/sampling			
Part B – to be submit	ted as soo	n as practicable	e
Any more accurate information on to notification under Part A.	he matters for		
Measures taken, or intended to be t a recurrence of the incident	aken, to prevent		
Measures taken, or intended to be t limit or prevent any pollution of the which has been or may be caused by	environment		
The dates of any unauthorised emis facility in the preceding 24 months.	ssions from the		
Name*			
Post			
Signature			
Date			

^{*} authorised to sign on behalf of the operator

Schedule 6 - Interpretation

"accident" means an accident that may result in pollution.

"application" means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

"authorised officer" means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

"building" means a construction that has the objective of providing sheltering cover and minimising emissions of noise, particulate matter, odour and litter.

"emissions to land" includes emissions to groundwater.

"emissions of substances not controlled by emission limits" means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations 2016, SI 2016 No.1154 and words and expressions used in this permit which are also used in the EP Regulations have the same meanings as in those regulations.

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"Hazardous property" has the meaning given in Annex III of the Waste Framework Directive.

"Industrial Emissions Directive" means Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions.

"List of Wastes" means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

"Manure and slurry" have the following meaning:

- Manures may be either slurries or solid manures.
- Slurries consist of excreta produced by livestock whilst in a yard or building mixed with rainwater and wash water and, in some cases, waste bedding and feed. Slurries can be pumped or discharged by gravity.
- Slurry includes duck effluent, seepage from manure and wash water.
- Solid manures include farmyard manure (FYM) and comprise material from straw-based housing systems, excreta with lots of straw/sawdust/woodchips in it, or solids from mechanical separators.
- Most poultry systems produce solid manure (litter).
- Solid manure can generally be stacked.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"pests" means Birds, Vermin and Insects.

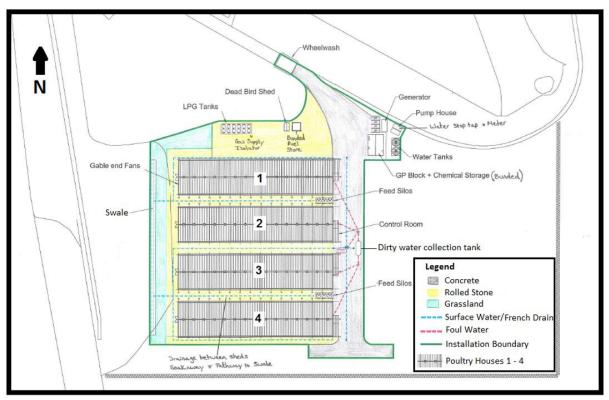
"Waste code" means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk.

"Waste Framework Directive" or "WFD" means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste.

"year" means calendar year ending 31 December.

Schedule 7 - Site plan

Site plan - showing installation boundary as referred to in condition 2.2.1.



Crown Copyright. All rights reserved. Environment Agency, 100024198, 2017.

Site Location Plan



Crown Copyright. All rights reserved. Environment Agency, 100024198, 2017.

END OF PERMIT

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

EPR/AP3439DZ/A001 Issued 13/07/17 Page 1 of 82

Consultation on our decision document recording our decision-making process

The Permit Number is: EPR/AP3439DZ

The Applicant is: Newcome-Baker Farms Limited

(company number 00591983)

The Installation is located at: Whin Close Poultry Farm

Docking Road Sedgeford Hunstanton Norfolk PE36 5LL

Application consultation commenced on: 19/08/16
Application consultation ended on: 23/09/16

Draft decision consultation commenced on: **26/05/17**Draft decision consultation ended on: **26/06/17**

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 any relevant matter raised in the responses we received.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 2 of 82

Preliminary information and use of terms

We gave the application the reference number EPR/AP3439DZ/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/AP3439DZ. We refer to the proposed permit as "the **Permit**" in this document.

The Application was duly made on 5 August 2016.

The Applicant is Newcome-Baker Farms Limited (company number 00591983). We refer to Newcome-Baker Farms 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 Newcome-Baker Farms Limited "the **Operator**".

The proposed facility is located at Whin Close Poultry Farm, Docking Road, Sedgeford, Hunstanton, Norfolk PE36 5LL. 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.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 3 of 82

Purpose of this document

This decision document:

- explains how the Application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

Unless the decision document specifies otherwise we have accepted the Applicant's proposals.

Structure of this document

- 1. Our proposed decision and legal framework
- 2. How we reached our decision
- 3. The Installation
- 4. Key issues
 - 4.1 Ammonia Emissions Ecological Receptors
 - 4.2 Ammonia Emissions Human Receptors
 - 4.3 Odour
 - 4.4 Noise
 - 4.5 Dust/Bioaerosols
 - 4.6 Site drainage
 - 4.7 Accident Management
 - 4.8 Pests
 - 4.9 New Intensive Rearing of Poultry or Pigs BAT Conclusions document
- 5. Other considerations
 - 5.1 Operator competence
 - 5.2 Other legal requirements

Annex 1: Application consultation process

Annex 2: Minded to decision consultation process

EPR/AP3439DZ/A001 Issued 13/07/17 Page 4 of 82

1. Our proposed decision & legal framework

We have decided to grant a Permit to the Applicant. This will allow it 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 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.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 5 of 82

2. How we reached our decision

2.1 Receipt of Application

The Application was received on 24 June 2016; however we required further information from the Applicant in order for us to consider the Application duly made. This information was requested on 15 July 2016. The Applicant submitted additional information in response to the request which was deemed sufficient to enable us to duly make the Application.

The Application was duly made on 5 August 2016. 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 the requests for further information as set out in table 1 below.

Table 1 Summary of requests for further information			
Description	Date	Comments	
Request for Further Information sent 15/08/16	Information received 26/08/16	Further details relating to noise modelling assessment.	
Schedule 5 notice requesting further information issued 06/12/16	Information received 22/12/16	Clarification of site drainage, poultry house heating system, clean out procedures, standby generator, carcass disposal, on-site dwelling and receipt of Accident Management Plan, Dust Management Plan and revised Site Condition Report.	
Schedule 5 notice requesting further information issued 27/03/17	Information received 31/03/17	Confirmation of compliance with the Best Available Techniques (BAT) Conclusion document dated 21/02/17, and receipt of a revised Odour Management Plan.	

A copy of the above information notices and the relevant 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. These requirements are directly incorporated into the IED, which applies to the Installation and the Application. 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.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 6 of 82

We advertised the Application by a notice placed on our website, which contained all the information required by the IED, including telling people where and when they could see a copy of the Application. We also placed an advertisement in the Lynn News newspaper.

We placed a paper copy of the Application and all other documents relevant to our determination (see below) on our Public Register at: The Environment Agency offices, Brampton Office, Bromholme Lane, Brampton, Huntingdon PE28 4NE. 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":

- King's Lynn and West Norfolk Borough Council (Environmental Health)
- Public Health England (PHE)
- Director of Public Health, Norfolk 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. 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.

In accordance with the Environment Agency's Public Participation Statement and RGN 6 for Determinations involving Sites of High Public Interest, we also consulted on the draft decision and permit 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 26 May 2017 – 26 June 2017 and in the Lynn News on 26 May 2017. Additionally, we made available electronic copies of the draft decision and draft permit on the webpage, and copies of the draft decision and draft permit were placed on our public register at the Environment Agency offices, Brampton Office, Bromholme Lane, Brampton, Huntingdon PE28 4NE. We have considered all timeous representations in reaching our decision. Further details can be found in Annex 2 of this document.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 7 of 82

3 The Installation

3.1 Description of the Installation and related issues

3.1.1 The permitted activities

The Installation is subject to the Permitting Regulations because the Applicant will carry 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 168,000 chickens (fowl) at the Installation, so falls within the activity mentioned above.

3.1.2 The site location and surroundings

Whin Close Poultry Farm is situated approximately 1.5 kilometres east of the village of Sedgeford in Norfolk. The Installation is approximately centred on National Grid Reference TF 73051 36280.

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

- there are no residential properties within 400m of the Installation boundary; and
- the closest residential property is located more than 650m to the north east of the Installation boundary, with further properties located more than 800m to the north west of the boundary; and
- there are three Special Areas of Conservation (SACs), two Special Protection Areas (SPAs) and three Ramsar sites within 10km of the Installation; and
- there are also three Sites of Special Scientific Interest (SSSIs) located within 5km of the Installation; and
- there are no other nature conservation sites, such as National Nature Reserves (NNRs), Local Nature Reserves (LNRs), Local Wildlife Sites (LWSs) or Ancient Woodlands, located within 2km of the Installation.

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.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 8 of 82

3.1.3 What the Installation does & proposed site design

The Installation comprises four poultry houses, numbered one to four, which operate with a capacity of 168,000 broiler places designed for the rearing of chicken for meat production. Chicks are brought in from hatchery at a day old and at 35 days a proportion of the birds are removed for slaughter, with the remaining birds reared to approximately 41-42 days of age, before being transported off site for processing.

All four poultry houses are ventilated by roof fan outlets with an emission point higher than 5.5 metres above ground level and an efflux velocity at or greater than 11 metres per second, and side wall inlets. All houses also have gable end fans, although these are operated infrequently to maintain temperature, typically in the summer months. The houses are warmed by modern thermostatically controlled hot water heaters fuelled by Liquid Petroleum Gas (LPG).

We consider that the poultry houses are designed and built in accordance with the best available techniques (BAT). The housing is insulated and has a damp proof course. The housing is fully insulated with a U-Value of approximately 0.4 W/m²/°C.

At the end of the growing period, all birds are removed from the houses and the litter is exported off site and either spread on land owned by the Operator or, as a contingency when there are limitations to spreading such as unsuitable weather conditions, transported to power stations for use as fuel. The empty houses are then washed and disinfected ready for the next crop. The wash water from inside the houses is channelled to an underground collection tank via internal drainage points located within each of the buildings. All external yard surface water is channelled via a series of open drains on the concrete apron. During depletion and clean out of the houses a valve located at the collection point is manually changed over and all surface water diverts to the underground collection tank. The contents of the collection tank are then exported off site and spread on land owned by the Operator.

Roof water from the poultry houses and yard surface water (under normal circumstance, i.e. not during clean out times) drain via French drains running along the sides of the houses to a swale, located to the west of the poultry houses, acting as a soakaway.

The land around the Installation is used primarily for arable farming, although there are some wooded areas and meadows. The land rises gently towards hills to the north-east and falls towards the Heacham River valley to the south-west. Associated food is stored on the Installation in silos adjacent to the poultry houses, positioned away from site traffic. Mortalities are collected daily and stored in locked and sealed containers on site prior to removal and disposal in accordance with the Animal By-Product Regulations.

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.

Table 2 Key features of the Installation		
Operational features	Description	
Broiler rearing	168,000 day old chicks reared for 35 or 41/42 days on site.	
Poultry house	High velocity roof fans (11m/s) and gable end fans (operated	
ventilation	intermittently during hot weather conditions).	
Litter management	No litter will be stored on site. Litter is collected at the end of	
	each cycle and transferred off site.	
Waste water	All contaminated wash water from inside the buildings and from	
management	yard areas during clean out is directed to an underground	
	collection tank. The tank is emptied and wash water disposed of	
	off-site after each clean out.	
Carcass management	Carcasses removed daily and stored in locked and sealed	
	containers on site. Collected from site at least twice a week by	
	an approved licensed contractor and disposed of in accordance	

EPR/AP3439DZ/A001 Issued 13/07/17 Page 9 of 82

	with the Animal By-	Products Regulations.	
Site drainage	with the Animal By-Products Regulations. The areas adjacent to three sides of the houses are rolled stone, with a concreted area to the eastern end of the houses. Poultry houses have no guttering. Roof water from the poultry houses is collected by French drains, which act as soakaways, with a piped connection to an on-site swale, for periods of heavy rainfall. In addition uncontaminated or clean yard surface water (during normal operations, not at clean out times) drains to these French drains and on to the swale. The swale is formed through the digging out and bunding of soil, and will only be used in times of heavy rainfall. It will be large enough to ensure no run off will occur from the Installation. Suitable treatment of potentially lightly contaminated water prior to discharge to surface water or ground can include swales as detailed in section 3.1 of our sector guidance note EPR 6.09 'How to comply with your environmental permit for intensive farming', version 2.		
Storage and use of	Description	Maximum amount	Annual throughput
raw material		stored	
	Disinfectants	125 litres	875 litres
	Rodenticides /	None stored	45kg rodenticide
	Insecticides		20 litres insecticide
	Veterinary	313,500 doses	2,352,000 doses
	medicines	(approximately)	(approximately)
	Bedding (straw /	20 tonnes	140 tonnes
	shavings)	(approximately)	
	Diesel	1,200 litres	Variable
	LPG	12,000 litres	Variable

The Application has been assessed in line with our sector guidance note: EPR 6.09 '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-e.pdf.

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.

The Applicant has confirmed that all Installation facilities and operating techniques will be in compliance with our sector guidance note EPR 6.09.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 10 of 82

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 habitat 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 Procedures in place in case of **accidents** occurring at the Installation
- 4.8 The possible impact of **pests**
- 4.9 Changes arising as a result of the New Intensive Rearing of Poultry or Pigs BAT Conclusions document

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.

Ammonia emissions 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 2010 (which implements the Habitats and Birds Directives) provides protection in law for SACs and 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.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 11 of 82

This is done by considering the Installation's process contribution (PC) and the background levels.

When assessing the Installation's likely impact to flora and fauna more generally (including within other sites such as NNRs, LNRs, LWSs and Ancient Woodland) 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 loads¹ are set to protect the most vulnerable habitat types. 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 is 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 and Ramsar sites within 10km of the Installation boundary; any 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 three SACs, two SPAs, three Ramsar sites and three SSSIs located within these screening distances.

We have used the Environment Agency's Ammonia Screening Tool, version 4.5 (AST v4.5) to assess the predicted impact of the Installation at those sites identified within the above distance criteria.

We have applied a 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 an 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 any particular designated site;
- there is the potential for an in-combination effect with existing farms at a SAC, SPA, Ramsar site and/or SSSI if emissions are >Y% of the CLe or CLo;
- the Installation is already permitted and the original permit required an Improvement Condition to reduce ammonia emissions; or
- the Installation is within 250m of a nature conservation site.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 12 of 82

_

¹ 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.

Table 3 Screening thresholds		
Designation	Y%	Z%
SAC, SPA, Ramsar site	4	20
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: 1µg/m³; and
- other vegetation: 3µg/m³.

The assessment also considers the deposition of ammonia resulting in nutrient enrichment (and acidification) against relevant CLos. However, where a CLe of $1\mu g/m^3$ 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 $3\mu g/m^3$ is applied, deposition is considered as part of the assessment.

A 4% trigger threshold has been designated² for assessment of SACs, SPAs and Ramsar sites such that:

- if the Process Contribution (PC) is below 4% of the relevant CLe or CLo then the Installation is not considered likely to have a significant effect on these sites and can be permitted with no further assessment; and
- if this threshold is exceeded, the Installation is considered likely to have a significant effect and an appropriate assessment (in consultation with Natural England) is required. An overlapping in combination assessment will also be completed where existing farms are identified within 10km of the SAC, SPA or Ramsar site.

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
- if this threshold is exceeded the Installation is considered likely to damage any of the relevant features of a SSSI and further assessment (in consultation with Natural England) is required. An in combination assessment will be also completed to establish the combined PC for all existing farms identified within 5 km of the SSSI.

4.1.1 Ammonia Assessment – SAC / SPA / Ramsar sites

Following the methods described in section 4.1 above, our initial screening has indicated that emissions from the Installation will only have a potential impact on the SAC, SPA and Ramsar sites with a precautionary critical level of 1µg/m³ if they are within 2,721 metres (m) of the emission source. Beyond 2,721m the PC is less than 0.04µg/m³ (i.e. less than 4% of the precautionary 1µg/m³ critical level) and therefore beyond this distance the PC is insignificant.

In this case all the SACs, SPAs and Ramsar sites are more than 2,721m from emission sources at the Installation (see table 4 below). Therefore the Installation is not considered to

EPR/AP3439DZ/A001 Issued 13/07/17 Page 13 of 82

² The Air Quality Technical Advisory Group (AQTAG) agreed the thresholds in 2007, this was in consultation with Natural England and, at the time, the Countryside Council for Wales (now Natural Resources Wales) as both bodies are represented on the AQTAG group. Thresholds are expressed as a percentage of the relevant critical level or load and are based on: best available evidence of impacts at the time, professional judgement, and consideration that farms were already contributing to existing background levels. All thresholds are based on the best available evidence. We will review thresholds if/when new evidence becomes available.

have likely significant effects on any of these sites and 'screens out' of any further assessment.

Where the precautionary level of $1\mu g/m^3$ is used, and the process contribution is assessed to be less than 4% the site automatically screens out as insignificant and no further assessment of critical load is necessary. In this case the $1\mu g/m^3$ level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no likely significant effect.

Table 4 – SAC, SPA and Ramsar site assessment		
Name of SAC/SPA/Ramsar site	Distance from emission	
	sources (m)	
The Wash & North Norfolk Coast SAC	6,795	
North Norfolk Coast SAC	7,422	
Roydon Common & Dersingham Bog SAC	7,836	
North Norfolk Coast SPA	7,422	
The Wash SPA	6,795	
Dersingham Bog Ramsar site	7,836	
North Norfolk Coast Ramsar site	7,422	
The Wash Ramsar site	6,795	

As the Installation 'screens out' as not being likely to have significant effects on any of the sites above, we are not required to consult with Natural England over an appropriate assessment. However, for their information we have sent them details of our 'screening' assessment (via a form called an Appendix 11).

4.1.2 Ammonia assessment - SSSIs

Following the methods described in section 4.1 above, our initial screening indicated that emissions from the Installation will only have a potential impact on SSSI sites with a precautionary critical level of 1µg/m³ if they are within 933m of the emission source.

Beyond 933m the PC is less than 0.2µg/m³ (i.e. less than 20% of the precautionary 1µg/m³ critical level) and therefore beyond this distance the PC is insignificant.

In this case all the SSSIs are more than 922m from emission sources at the Installation (see table 5 below). Therefore the Installation is not considered likely to damage any of the relevant features of the SSSIs and 'screens out' of any further assessment.

Where the precautionary level of $1\mu g/m^3$ is used, and the process contribution is assessed to be less than 20% the site automatically screens out as insignificant and no further assessment of critical load is necessary. In this case the $1\mu g/m^3$ level used has not been confirmed by Natural England, but it is precautionary. It is therefore possible to conclude no likely damage to these sites.

Table 5 – SSSI assessment		
Name of SSSI	Distance from emission sources (m)	
Snettisham Carstone Quarry	4,516	
Heacham Brick Pit	5,093	
Hunstanton Park Esker	5,110	

EPR/AP3439DZ/A001 Issued 13/07/17 Page 14 of 82

4.2 Ammonia – Human Health Impact Assessment

The Health Protection Agency (now Public Health England) 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 manage particulate emissions to minimise ammonia emissions from the Installation are included in its 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 conditions to minimise emissions during the cycle. 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 shall 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 guidance, H1 Annex F – Air Emissions. These are a long term (LT) EAL of 180ug/m³ and a short term (ST) EAL of 2500ug/m³.

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 the Applicant's odour modelling along with conservative assumptions with regards to ammonia. This is to develop a model to produce indicative impacts of ammonia to human health at the receptors that were in the Applicant's modelling, which were representative of the surrounding area. The emission concentrations were based on the following assumptions, which we consider it reasonable to make:

- the 168,000 birds will be evenly split between the four poultry houses; and
- using an ammonia emission factor of 0.034 kg NH₃/animal place/year for all birds, in housing with fan ventilated, fully littered flooring, and non-leaking drinkers.

The modelling shows that at nearby receptor locations the impact is unlikely to be over the insignificance criteria of 1% LT and 10% ST. Our modelling indicates that exceedances of the EALs are highly unlikely.

We have carefully assessed the impacts and taken advice from PHE, who are the authority in matters relating to public health. The consultation response from PHE 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).

EPR/AP3439DZ/A001 Issued 13/07/17 Page 15 of 82

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 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 stack 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 no sensitive receptors within 400m of the Installation boundary. The closest sensitive receptor to the Installation boundary is more than 650m away. Despite this the Applicant has submitted an OMP, 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 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 storage or disposal; and
- house clean out operations.

The Applicant has also included addition information on time limits for clean out operations in its response to the first Schedule 5 Notice (received 22/12/16) to minimise the risk of odour pollution.

In addition, the Applicant has submitted, as part of the Application, an odour modelling report which the Environment Agency has assessed, see section 4.3.3 below.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 16 of 82

4.3.2 Odour Management Plan

The Installation is not located within 400m of sensitive receptors, however an OMP was submitted with the Application, reference Appendix 7 – 08b Odour Management Plan, dated January 2016. A revised OMP was received on 31 March 2017 in response to a Schedule 5 Notice requesting further information. The 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' and our Top Tips Guidance and Poultry Industry Good Practice Checklist (August 2013) as well as the site specific circumstances at the Installation. We consider that the OMP is acceptable.

The Operator is required to manage activities at the Installation in accordance with condition 3.3.1 of the Permit and its OMP. The OMP includes odour control measures, in particular, procedural controls such as manufacture and selection of compound foods, feed delivery and storage, ventilation techniques, litter conditions and management, carcass disposal and storage, management of drinking water systems, destocking of livestock (thinning and final depletion), clean out (litter removal) and house washing operations and dirty water management. It includes contingency measures to minimise odour pollution during abnormal operations such as unbalanced diets or disease/virus outbreaks causing excessive droppings and higher moisture content in litter, spillages of surplus water, spillages of food, carcasses stored on site for prolonged periods and building structure failure.

The OMP also provides a suitable procedure in the event that complaints are made to the Operator. The OMP is required to be reviewed at least every 4 years and/or after a complaint is received, whichever is the sooner.

The Environment Agency has reviewed the OMP and consider it complies with the requirements of our H4 Odour management guidance note. We agree with the scope and suitability of key measures but this should not be taken as confirmation that the details of equipment specification design, operation and maintenance are suitable and sufficient. That remains the responsibility of the Operator.

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

4.3.3 Odour Modelling

The Applicant has submitted as part of the Application an odour modelling report (Document reference: 'A Dispersion Modelling Study of the Impact of Odour from the Proposed Poultry Houses at Whin Close, near Sedgeford in Norfolk', AS Modelling & Data Ltd, dated 07/12/15). The Applicant has considered the predicted impact of odour at sensitive receptors within 1,000m of the poultry houses.

The report concludes:

The results of the modelling indicate that, should the proposed development of the poultry unit at Whin Close proceed, the 98th percentile hourly mean odour concentration at nearby residences not associated with the farm would be below the Environment Agency's benchmark for moderately offensive odours, a 98th percentile hourly mean of 3.0 ou_E/m³ over a one year period. The predicted 98th percentile hourly mean odour concentrations are also below 1.0 ou_E/m³ which means that odour from the proposed poultry unit would rarely be detectable.

Environment Agency has assessed the likelihood of an exceedance of the odour threshold of $3ou_E/m^3$ at the Installation. We conclude:

We have interrogated the applicant's time varying emissions file and analysed their modelling approach, along with considering our own growth cycle based on relevant

EPR/AP3439DZ/A001 Issued 13/07/17 Page 17 of 82

literature (Hayes et al) and observed meteorological data. We are confident that the modelling approach taken by the applicant is acceptable and follows our guidance. We have conducted an audit that is proportionate to the risk, conducting limited sensitivity checks to determine the outcome.

Our sensitivity analysis shows that considering modelling uncertainty and our worst case growth cycle emissions data, the applicant's predictions can be used for permit determination. We agree that the worst case impact at any receptor is not likely to exceed the $3ou_E/m^3$ benchmark.

Many assumptions are made when modelling odour, and therefore model predictions are associated with a number of uncertainties. Predictions therefore are indicative only, and it is necessary to consider wider odour management at any site when making permitting decisions. A robust OMP, together with an H1 odour risk assessment, submitted by the Applicant, has been assessed as described in sections 4.3.1 and 4.3.2 above.

4.3.4 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 and the OMP. Once the operation of the Installation commences, there is a requirement to review and record (as soon as practicable after a complaint) whether changes to the OMP should be made and make any appropriate changes to the OMP identified by the review.

We are satisfied that operations carried out on the Installation will minimise the risk of odour pollution.

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. Under section 3.4 of this guidance a Noise Management Plan (NMP) must be approved as part of the permitting determination, if there are sensitive receptors within 400m of the Installation boundary.

Condition 3.4 of the Permit reads as follows:

Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan, to prevent or where that is not practicable to minimise the noise and vibration.

In this instance there are no sensitive receptors within 400m of the Installation boundary but the Applicant has submitted an NMP anyway, and further details are provided in section 4.4.2 below.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 18 of 82

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

- large and small vehicles accessing the site;
- vehicles and machinery carrying out operations on site;
- feed delivery and transfer from lorry to storage;
- operation of ventilation systems;
- clean out operations;
- alarm system and standby generator testing;
- chickens;
- removal of litter and waste water;
- personnel; and
- building repair work.

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

In addition, the Applicant has submitted as part of the Application a noise modelling report which we have assessed, see section 4.4.3 below.

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.

There are no sensitive receptors within 400m of the Installation boundary. However, the Applicant has provided a noise management plan (NMP) as part of the Application supporting documentation, reference Appendix 8 – 08c Noise Management Plan.

Operations with the most potential to cause noise nuisance have been assessed and control measures put in place for large and small vehicles accessing the site and manoeuvring around it (specifically HGVs), vehicles and machinery carrying out operations on site, feed delivery and transfer from lorry to storage, operation of ventilation systems, clean out operations, standby generator testing, noise from chickens and removal of litter and waste water. In addition, the NMP includes confirmation of annual staff training including noise management, and also noise complaints procedures. The NMP will be reviewed at least every 4 years and/or after an Environment Agency substantiated complaint is received, whichever is the sooner.

Please note: the Applicant has only considered HGV and other vehicle movements within the Installation boundary, which is consistent with our information requirements. Noise emitted from vehicles travelling on the local road network are primarily matters for the local planning authority when considering the planning application.

There is the potential for noise from the Installation beyond the Installation boundary. However the risk of noise beyond the Installation boundary has been assessed as unlikely to cause a nuisance.

4.4.3 Noise modelling

The Applicant submitted with the initial Application Appendix 9: 09 – Environmental Impact Assessment. In section 8.5 Noise, a noise report was mentioned as Appendix 9a, and a report of an existing poultry unit surveyed for noise was mentioned as Appendix 9b, but these reports were not submitted at the time. These were subsequently requested and received

EPR/AP3439DZ/A001 Issued 13/07/17 Page 19 of 82

from the Applicant prior to duly making the Application. The noise report is referenced 'Plant Noise Assessment', dated October 2015 and contained a noise impact assessment for the Installation. The other report, referenced 'Noise study of existing poultry unit during bird removal', Acorus, November 2015 included results from an existing unit. These have been considered when determining the risk of potential noise impacts from the Installation.

The Applicant concluded that there will not be a significant adverse impact at receptors from typical operation.

The Applicant has applied for a permit to install 4 poultry units, each with 15 roof vents and 3 silo fans, gable end fans (although only used in period of very warm weather) and LPG fuelled boilers for heating the poultry houses. However the assessment submitted to support the Application was for 8 poultry units and a biomass boiler for heating the poultry houses. We undertook sensitivity checks on the Applicant's assessment of the typical operation, based on the plant actually applied for, which indicate the specific level is below day-time and night-time background and can be considered low risk.

We also considered the points raised with respect to the noise assessment in the Borough Council of King's Lynn & West Norfolk memorandum. These have been addressed in Annex 1 of this document.

We have completed an audit of the Applicant's noise assessment report and additional information, and a summary of our audit is below.

- 1. The Applicant's conclusions, that there will not be a significant adverse impact at receptors from typical operation, are supported by their modelling. However:
 - the consultant's predictions include plant that has not been applied for as part of this Application, which has led to an over prediction;
 - our check calculations indicate that the rating level will be below background (L_{A90}) and can be considered low risk; and
 - we undertook sensitivity to a single HGV movement during typical operation to account for deliveries.
- 2. The Applicant's conclusions that there will not be a significant adverse impact at receptors from clear-out are supported by their modelling. However:
 - our sensitivity checks indicate that the impact could be approaching a significant adverse impact however considering the context it may be appropriate to modify the impact to low risk; and
 - the context we considered as part of this modification include that:
 - clear out will only occur once every 7 weeks: and
 - the predicted ambient levels (residual (L_{Aeq}) + specific (L_{Aeq})) are well below the World Health Organisation's (WHO) Lowest Observed Adverse Effect Level (LOAEL) of 40dB(A).

The Applicant's modelling did predict potential adverse impacts during the day-time at the nearest two receptors during typical operation and clear-out for an 8 poultry house proposal, with the associated additional roof fans, silos, biomass boiler and other plant. We have undertaken a detailed audit of the Applicant's assessment and have made a number of observations to which we have undertaken our own sensitivity checks.

For the clear-out, the Applicant did predict potential adverse impacts at nearby receptors, however the Applicant has not considered the context associated with the impact, as outlined in BS4142. The night-time background and specific levels are below 30 dB(A), which we consider as very low, therefore we considered absolute levels against the WHO's night-time Likely Observed Adverse Effect Level (LOAEL). Our checks indicate that the absolute levels are well below the night-time LOAEL. Therefore, in line with the Noise Policy Statement for England (Department of the Environment and Rural Affairs (Defra), Noise Policy Statement

EPR/AP3439DZ/A001 Issued 13/07/17 Page 20 of 82

for England (NPSE), March 2010) mitigation to minimise the effects are not required and we have modified the night-time impact to low.

4.4.4 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 Applicant 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 4 years, 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.

Although we do not necessarily agree with the absolute numerical predictions given in the noise modelling report, we are satisfied that the manner in which operations are carried out on the Installation will minimise the risk of noise pollution.

4.5 Dust and Bioaerosols

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

There are no sensitive receptors within 650m of the Installation boundary. This fact, together with good management of the Installation, keeping areas clean from build up of dust, other measures in place to reduce dust and risk of spillages, such as manure and feed management/delivery procedures, all reduce the potential for emissions impacting the nearest receptors.

Guidance on our website concludes that applicants need to produce and submit a dust and bioaerosol risk assessment with their applications if there are relevant receptors within 100 metres of their farm, e.g. the farmhouse or farm workers' houses. Details can be found via the link below:

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

There are no receptors within 100m of the Installation boundary, however the Applicant has submitted a dust and bioaerosol risk assessment (received on 22 December 2016, reference 'Dust Management Plan'), which was written in accordance with Environment Agency's EPR 6.09 How to Comply with your Environmental Permit for Intensive Farming Appendix 11 guidance.

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

4.6 Site Drainage

EPR/AP3439DZ/A001 Issued 13/07/17 Page 21 of 82

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.

Roof water from the poultry houses is considered to be clean, as the ventilation is by means of high velocity roof extraction fans, with an efflux velocity of 11 m/s. In addition, the measures proposed by the Applicant in its management systems include regular buildings inspection, site maintenance and procedures to keep the buildings clean and prevent the build up of dust on site. The Operator is required to comply with its management systems by condition 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 and specifically the section entitled 'Appropriate measures for preventing and minimising fugitive emissions, Management of drainage systems and run-off', which states:

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

The poultry houses do not have guttering and therefore roof water falls to areas alongside the houses. The areas along the long sides of the houses, and the western ends of each house are rolled stone areas with French drains underneath. The French drains act as soakaways, and in addition have a piped connection to an on-site swale, for periods of heavy rainfall. In addition, yard surface water (during normal operations, not at clean out times) drains to these French drains and on to the swale. French drains and swales are also considered as sufficient interception and treatment for lightly contaminated roof water (although in this instance roof water is considered to be clean).

Additional ventilation may be required infrequently, during times of hot weather, and this is provided by gable end fans located to the western ends of the poultry houses. Additional mitigation is required for drainage from areas where dust may gather from this type of ventilation, as detailed in the section of EPR 6.09 mentioned above, which states that:

Where the ventilation system has outlets through side-walls, interception is required before drainage reaches surface water systems. Interception may include grassed areas, swales or collection pits.

As detailed above, the areas to the western ends of the houses are rolled stones with French drains underneath which provide sufficient mitigation, and with additional mitigation in the form of the swale. The Permit will ensure (via the management condition, 1.1) that the Operator keeps these areas clean to minimise potential pollution of the surface water prior to draining through the French drains and on to the swale.

The swale is formed through the digging out and bunding of soil, acting as a soakaway and will potentially only be used in times of heavy rainfall, acting as a holding area/balancing pond should there be any storm water in a short period of time.

Surface water from the concreted yard to the eastern end of the houses drains via the French drains described above, and potentially onto the swale, during normal operation.

During clean out of the poultry houses where the concreted yard may become contaminated, a diverter valve is manually operated to switch the drainage from the yard area to channel it to an underground dirty water collection tank to ensure no polluted water enters the clean water drainage system. The collection tank is compliant with the Water Pollution (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) Regulations 2010 (SSAFO) and is of sufficient size to contain all wash waters during extreme weather and will be visually inspected to ensure it does not overflow. Measures are in place to ensure the diverter valve is in correct position to divert dirty water to the tank prior to commencement of clean out. All wash water inside the poultry houses goes straight in to the dirty water drainage system and on to the dirty water collection tank. Should it be required during times of excess rainfall, the

EPR/AP3439DZ/A001 Issued 13/07/17 Page 22 of 82

dirty water tank can be emptied by tanker and mucking out operations be done at the discretion of the manager, ensuring only clean water enters the clean drainage system.

Other sources of potential pollution from fugitive emissions have been assessed, such as dust from feed silos and transfer. 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. Foot baths will be managed so as to prevent overflow, and the design of the wheel wash will prevent any entry into surface or groundwater discharge and minimise any releases. Spent disinfectants from the foot baths and wheel wash are disposed of with the dirty water.

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 should occur as a result of operations at the Installation.

4.6.2 Risk of contamination to groundwater, local water supply and local surface waters

We have assessed the Applicant's revised Site Condition Report (reference 'Appendix 2 Site Condition Report', received on 22 December 2016 in response to the Schedule 5 Notice Request for Further Information sent on 6 December 2016), together with the Applicant's submitted desk study and contamination report received at the same time (referenced as 'Appendix 3 Phase I Desk Study Report, A F Howland Associates ref: MSH/16.355/ Phase I', dated 18 October 2016 and 'Appendix 4 Phase II Contamination Report, A F Howland Associates ref: TJS/16.355/ Phase II', dated 19 December 2016 respectively).

We concluded that the information provided with the Application (detailed above) indicates that the potential risk to ground waters and surface waters from historic land contamination associated with the site of the Installation is unlikely to be significant.

In addition, for the reasons given in section 4.6.1 above, we are satisfied that no pollution of groundwater or surface water should occur as a result of operations at the Installation.

4.6.3 Groundwater and soil monitoring

IED requires that new permits contain appropriate measures relating to protection of soil, groundwater and groundwater monitoring. The Environment Agency's H5 Guidance states that it is only necessary (ie an appropriate measure) for the Operator to take samples of soil or groundwater and measure levels of contamination where there is evidence that there is, or could be, existing contamination and:

- the environmental risk assessment has identified that the same contaminants are a particular hazard; or
- the environmental risk assessment has identified that the same contaminants are a hazard and the risk assessment has identified a possible pathway to land or groundwater.

H5 Guidance further states that it is not essential for the Operator to take samples of soil or groundwater and measure levels of contamination where:

• the environmental risk assessment identifies no hazards to land or groundwater; or

EPR/AP3439DZ/A001 Issued 13/07/17 Page 23 of 82

- the environmental risk assessment identifies only limited hazards to land and groundwater and there is no reason to believe that there could be historic contamination by those substances that present the hazard; or
- the environmental risk assessment identifies hazards to land and groundwater but there is evidence that there is no historic contamination by those substances that pose the hazard.

The revised site condition report (SCR) for the Installation (received on 22 December 2016) demonstrates that there are no hazards or likely pathway to land or groundwater and no historic contamination on site that may present a hazard from the same contaminants.

This has been supported by additional information submitted by the Applicant on 22 December 2016 in response to a Schedule 5 Request For Further Information (reference 'Appendix 3 - A Phase I desk study to support Planning Permission Reference 15/02026/FM' and 'Appendix 4 A Phase II Contamination Report to support Planning Permission Reference 15/02026/FM').

A full evaluation of the information has been undertaken and, on the basis of the risk assessment presented in the SCR, we accept that the Applicant need not provide baseline reference data for the soil and groundwater at the site at this stage. Although condition 3.1.3 is included in the Permit, it is unlikely groundwater monitoring will be required.

4.7 Accident Management

An accident management plan has been submitted by the Applicant (reference 'Appendix 6 Accident and Emergency Management Plan' received on 22 December 2016 in response to the Schedule 5 Notice Request for Further Information sent on 6 December 2016). This includes details of the site infrastructure along with the location and an inventory of all tanks and stores. It also includes a plan of the drainage layout, and details of firefighting equipment, location of spill kits and diverter valves.

The emergency procedures are set out, giving priority to livestock welfare and avoiding environmental pollution. Procedures are written for different accident scenarios: overflow or failure of drainage system, power outage, fire, disease outbreak, and severe weather including flooding. An out of hours emergency rota is also included, detailing measures in place including alarms connected to sensors, staff on call to be within 2 miles of the site, remote monitoring of poultry houses via sensors, remote operation of poultry house conditions (temperature and ventilation) and CCTV remote monitoring of the site.

We are satisfied that the procedures in place are suitable to prevent or minimise environmental pollution in the event of an accident.

4.8 Pests

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

- good management of the installation;
- keeping areas clean;
- measures in place to reduce dust and risk of spillages such as manure and feed;
- litter kept as dry and friable as possible within the poultry houses;
- no litter stored on site: and
- carcasses removed daily from the poultry houses and stored in locked and sealed containers on site and collected from site at least twice a week.

In addition, the Applicant has pest control measures in place, including baits to control rats should they appear. Flies are unlikely to be a problem due to the short time used litter is on

EPR/AP3439DZ/A001 Issued 13/07/17 Page 24 of 82

site (removed approximately every 7 weeks) and manure is mixed in with litter in the poultry houses during operation.

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.

The Applicant has not submitted a Pest Management Plan with the Application, however permit condition 3.6 (detailed above) requires the Operator to provide one should we require this.

The Environment Agency is therefore satisfied that sufficient measure are in place to prevent or minimise the presence of pests on site.

4.9 New Intensive Rearing of Poultry or Pigs BAT Conclusions document

The new 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 will set out the standards that permitted farms will 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 farming permits covered by IED issued after the 21 February 2017 must be compliant in full from the first day of operation.

There are some new requirements for permit holders. The conclusions include BAT Associated Emission Levels (AELs) for ammonia emissions which will apply to the majority of permits, as well as BAT associated levels for nitrogen and phosphorous excretion.

For some types of rearing practices, stricter standards will apply to farms and housing permitted after the new BAT Conclusions are published.

4.9.1 New BAT conclusions review

There are 33 BAT Conclusion measures in total within the BAT Conclusion document dated 21 February 2017.

We sent out a 2nd Schedule 5 Notice request for information (dated 27 March 2017) requiring the Applicant to confirm that the Installation will comply in full with all the BAT Conclusion measures.

The Applicant has confirmed its compliance with all BAT Conditions for the Installation, in its document reference 'Schedule 5 Response' received on 31 March 2017.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 25 of 82

Table 6 sets out a more specific review of the measures the Applicant has applied to ensure compliance with the above key BAT measures.

Table 6 measures to ensure compliance with BAT Conclusions	
BAT measure	Applicant compliance measure
BAT 3 Nutritional management - Nitrogen excretion	The Applicant has confirmed it will demonstrate it 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.
	This confirmation was in response to the 2 nd Schedule 5 Notice request for further information, received 27 March 2017, which has been referenced in Table S1.2 Operating techniques of the Permit.
	Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 4 Nutritional management - Phosphorous excretion	The Applicant has confirmed it will demonstrate it achieves levels of Phosphorous excretion below the required BAT-AEL of 0.25 kg P ₂ O ₅ animal place/year by an estimation using manure analysis for total Phosphorous content.
	This confirmation was in response to the 2 nd Schedule 5 Notice request for further information, received 27 March 2017, which has been referenced in Table S1.2 Operating techniques of the Permit.
	Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
BAT 24 Monitoring of emissions and process parameters - Total Nitrogen and	Table S3.3 of the Permit concerning process monitoring requires the Operator to undertake relevant monitoring that complies with these BAT Conclusions.
Phosphorous excretion	
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:
	The staff will perform a daily boundary walk to check the surrounding area for high levels of odour, as well as this checks will be performed on the surrounding area by persons who do not regularly work on the farm.
	Visual (and nasal) inspections of potentially odorous activities will be carried out.
BAT 27	Table S3.3 of the Permit on process monitoring requires the Operator to undertake relevant monitoring that complies with

EPR/AP3439DZ/A001 Issued 13/07/17 Page 26 of 82

Table 6 measures to ensure compliance with BAT Conclusions		
BAT measure	Applicant compliance measure	
Monitoring of emissions and process parameters - Dust emissions	these BAT Conclusions. The Applicant has confirmed they will report the dust emissions to the Environment Agency annually by multiplying the dust emissions factor for broilers by the number of birds on site. This confirmation was in response to the 2 nd Schedule 5 Notice request for further information, received 27 March 2017, which has been referenced in Table S1.2 Operating techniques of the Permit.	
BAT 32 Ammonia emissions from poultry houses - Broilers	The BAT-AEL to be complied with is 0.01 – 0.08 kg NH3/animal place/year. The Applicant will meet this as the emission factor for broilers is 0.034 kg NH3/animal place/year. The Installation does not include an air abatement treatment facility, hence the standard emission factor complies with the BAT AEL.	

EPR/AP3439DZ/A001 Issued 13/07/17 Page 27 of 82

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 Guidance RGN 5 'Operator Competence'.

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 is initially 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 (RGN 5) 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 EPR RGN 1 'Understanding the meaning of operator'.

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

EPR/AP3439DZ/A001 Issued 13/07/17 Page 28 of 82

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 grant or refusal of development consent is a matter for the relevant local planning authority. The Environment Agency's obligation is therefore to examine and use any relevant information obtained or conclusion arrived at by the local planning authorities pursuant to those EIA Directive Articles.

In determining the Application we have considered the following documents:

- The Environmental Statement submitted with the planning application (which also formed part of the Application).
- The decision of the King's Lynn and West Norfolk Borough Council planning authority to grant planning permission on 4 August 2016.
- The response of the Environment Agency to the local planning authority in its role as consultee to the planning process.

From consideration of all the documents above, the Environment Agency considers that no additional or different conditions are necessary.

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"), the Permit is subject to the requirements of Schedule 22, which delivers the requirements of EU Directives relating to pollution of groundwater. As set out at section 4.6 above, we are satisfied that no pollution of groundwater or surface water should occur as a result of operations at the Installation.

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 decision in this case has been reached following a programme of extended public consultation, both on the original Application and later, separately, on the Permit and a draft decision document.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 29 of 82

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 beauty or amenity of any rural area.

We considered whether we should impose any additional or different requirements in terms of our duty to have regard to the various conservation objectives set out in Section 7, but concluded that we should not.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 30 of 82

(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.

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 this permit. Paragraph 1.3 of the guidance says:

"The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation."

EPR/AP3439DZ/A001 Issued 13/07/17 Page 31 of 82

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 2010

We have assessed the Application in accordance with guidance agreed jointly with Natural England and concluded that there will be no likely significant effect on any SAC, SPA or Ramsar site.

We consulted Natural England by means of an Appendix 11 assessment, and they have not questioned our conclusion, that the operation of the Installation would not have a likely significant effect on the interest features of protected sites.

The habitat assessment is summarised in greater detail in section 4.1 of this document. A copy of the full Appendix 11 Assessment can be found on the public register.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 32 of 82

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 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 Environment Agency website from 19 August 2016 – 23 September 2016 and in the Lynn News on 19 August 2016. Copies of the Application were placed on our public register at the Brampton Office, Bromholme Lane, Brampton, Huntingdon, PE28 4NE. Additionally, we also published this Application on our web pages on GOV.UK and made available electronic copies of the Application on the webpage.

The following statutory and non-statutory bodies were consulted:

- King's Lynn and West Norfolk Borough Council (Environmental Health)
- Public Health England (PHE)
- Director of Public Health, Norfolk County Council
- Health and Safety Executive (HSE)

1) Consultation Responses from Statutory and Non-Statutory Bodies

Response received from

King's Lynn and West Norfolk Borough Council Environmental Health (Environmental Quality Community Safety and Neighbourhood Nuisance, received 22/09/16)

Brief summary of issues raised

Environmental Quality

The high velocity ventilation system including discharge fans mounted in chimneys in mounted the ridge of the buildings indicates that there will be good dispersion of discharges and as the site is some distance from the nearest residential receptors it is concluded that the site is not likely to cause an exceedance of air quality standards.

Community Safety and Neighbourhood Nuisance

The Noise and Odour Management Plans supplied are generic descriptions of good agricultural practice, they do however cover the requirements for maintenance of equipment and record keeping and would act as a reasonable criteria to assess noise and odour complaints against. It is important that records of maintenance are kept and the schedules for maintenance are adhered to, to ensure that plant and machinery operates correctly and does not allow unnecessary emissions of noise or odour.

With respect to the Plant Noise Assessment some concerns were raised regarding the data in this report, as outlined below:

Section 3.2 pg 8 - Non-refrigerated HGV movements

(Please note that there appear to be two section 3.2, these comments relate to Model Input Data)

In this section there is a calculation on Line Source models for Daytime noise the calculation is:

LAeq(60mins) = 10log(2/3600)(10sec x 100.1x60.1dB)

I believe this should be

LAeq(60mins) = 10log(7/3600)(10sec x 100.1x60.1dB)

EPR/AP3439DZ/A001 Issued 13/07/17 Page 33 of 82

This is because the assumption is that there are 7 movements of vehicles and not 2. I believe that this will increase the noise levels at 3dB and this should be confirmed the assessment of noise at receptors in 5.1.2 will need to be recalculated.

Section 5 Noise Assessment

The following comments relate to both 5.1.1 Roof Mounted Vents and Grain Silos and 5.1.2 HGV Movements.

The consultant has applied a correction factor under BS4142:2014 of +4 in each case, the method of reaching this correction factor has not been discussed. There are three methods General, Subjective and Reference, the report should identify which method was used and how the correction for both tonality and impulsivity has been reached.

There is no data on how the specific noise levels in each case have been reached.

In 5.1.1 the Specific Noise Levels appear quite low, my understanding from the report and the planning application is that there will be 4 units each with 15 roof vents (@47dB @3m each) and 3 Silo Motors (@62dB @3m each). This is a total of 90 roof vents and 12 Silo Motors. In addition there is a biomass boiler with 4 noise sources identified, although it should be noted that there is no data on the boiler itself. In order to be satisfied as to the accuracy of the calculations it is necessary to see the data used to make the calculations and the calculations themselves.

For 5.1.2 I assume although it hasn't been confirmed in the report that the specific noise levels have been derived from the Line Calculations at 3.2 as already stated I believe there is an error in this calculation and as such the specific noise levels will need re-assessment.

Summary of actions taken or show how this has been covered

We have completed an audit of the Applicant's noise assessment report and additional information, (as set out in section 4.4.3 of this document). The concerns raised above have been addressed as follows:

Section 3.2 pg 8 - Non-refrigerated HGV movements

From discussions with the Applicant's consultant, we confirmed that the consultant assumed 7 HGV movements during the day and night and that the calculation in their report for their daytime includes a typographical error.

Section 5 Noise Assessment

The consultant has discussed the application of penalties in section 5 of their report. They have applied a +4dB correction to account for "potential acoustic features which may be clearly perceptible at nearby receptors" as part of both BS4142 assessments, roof mounted vents and grain silos and the assessment of HGVs. Penalties account for those plant with tonal, impulsive or intermittent characteristics that are audible at receptors. The consultant's specific levels during the day are below background levels, therefore this plant would not be audible at receptors and penalties would be inappropriate. As part of our sensitivity checks, we have considered the perceptibility of noise emissions to determine the appropriateness of the penalties applied by the consultant and consider them acceptable.

The consultant has referenced the levels provided by Hydor Limited for the roof vents. Their sound pressure level are consistent with the sound pressure level for Hydor's silent roof vent.

The noise level of the silos has been derived from monitoring undertaken by the consultant. The consultant has not provided justification of methods used to monitor the specific sound level, which is listed in the information to be reported in BS4142. However, the noise level is within the typical range for this type of plant and we consider the levels used acceptable.

The Applicant has applied for a permit to install 4 poultry units, each with 15 roof vents and 3 silo fans, and LPG fuelled boilers for heating the poultry houses. However the assessment submitted to support the Application was for 8 poultry units and a biomass boiler for heating

EPR/AP3439DZ/A001 Issued 13/07/17 Page 34 of 82

the poultry houses. We undertook sensitivity checks on the Applicant's assessment of the typical operation, based on the plant actually applied for, which indicate the specific level is below day-time and night-time background and can be considered low risk.

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

The Applicant 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 4 years, 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.

Although we do not necessarily agree with the absolute numerical predictions given in the noise modelling report, we are satisfied that the manner in which operations are carried out on the farm will minimise the risk of noise pollution from the Installation.

The Operator is required to comply in all respects with the Permit, all relevant domestic and European legislation, and use Best Available Techniques (BAT). 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 www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-statement.

Response received from

Public Health England (received 16/09/16)

Brief summary of issues raised

The application is for a permit to operate an intensive farming poultry installation, with 168,000 rearing places.

The site is located in a predominantly rural area with isolated residential properties. The closest residential receptors to the site lie approximately 400m to the north east of the proposed site boundary. Residential properties are also located 450m to the north west of the site boundary.

The main emissions of public health significance are emissions to air of bioaerosols, fugitive dust and particulate matter and ammonia.

The Operator is required to maintain and implement an Accident Management Plan as a standard Environment Agency condition of all intensive farming permits. The application does not include an Accident Management Plan and does not consider the potential for the risk of fire on site.

It is assumed by PHE that the installation will comply in all respects with the requirements of the permit, all relevant domestic and European legislation, and will use Best Available Techniques (BAT). This should ensure that emissions present a low risk to human health. Typically, a well-managed and well-regulated intensive farm presents little risk to local residents. The applicant has indicated that there are no sensitive receptors within 250m of the application site; therefore the risk of any emission from this farm impacting on public health is considered to be low.

More information is available on the public health impacts of intensive farms in the Public Health England Position Statement which can be found at:

EPR/AP3439DZ/A001 Issued 13/07/17 Page 35 of 82

http://webarchive.nationalarchives.gov.uk/20140714084352/http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb C/1195733812766

Summary of actions taken or show how this has been covered

The closest sensitive receptor is more than 650m to the north east of the Installation boundary, with receptors to the north west located more than 800m from the Installation boundary.

The Applicant was not required to submit an Accident Management Plan (AMP) with the Application, but to confirm that accidents have been covered in its management system (Application form B3.5 part 3b), and provide a summary of its management systems. The Applicant complied with these requirements.

However as a result of the PHE comments above, the Environment Agency requested the Applicant submit its AMP (Schedule 5 Notice, Request for Further Information dated 6 December 2016), and this was received on 22 December 2016. The AMP includes details of the site infrastructure along with the location and an inventory of all tanks and stores. It also includes a plan of the drainage layout, and details of firefighting equipment, location of spill kits and diverter valves. It sets out the emergency procedures, giving priority to livestock welfare and avoiding environmental pollution. Procedures are written for different accident scenarios, including overflow of drainage system, power outage, fire, disease outbreak, and flood.

The Environment Agency has assessed the AMP and is satisfied that risks have been considered and prevention and control measures and contingencies are satisfactory. Table S1.2 of the Permit ensures that the Operator complies with its AMP.

The Operator is also required to comply in all respects with the requirements of the Permit, all relevant domestic and European legislation, and use Best Available Techniques (BAT). 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 www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-statement.

The HSE and Director of Public Health were also consulted but no responses were received.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 36 of 82

2) <u>Consultation Responses from Members of the Public and</u> 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.

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 County / Parish / District Councillors

Response received from

Heacham Parish Councillor (received 17/08/16)

Brief summary of issues raised

1. On the 4th August 2016 the planning committee of the Borough Council of King's Lynn and West Norfolk voted to accept an application for a poultry unit (references included in response). I regularly attend such meetings to speak on behalf of Heacham Parish Council and found part of this proceeding unusual. Practical matters about drainage and prevention of contamination of the environment were not presented in the plans placed before the committee so that a judgement could be made as to whether they would be effective. It was recognised that there are issues, identified by the Environment Agency and Anglian Water but that these could be addressed by through conditions and the license agreements for the poultry unit.

The details of surface water management as described in your letter of 6th January 2016 and Anglian Water's requirements as detailed in an email from to BCKLWN on 9th February 2016 were not considered by the planning committee. An offhand comment from a planning officer about soakaways was, 'There will be drains'.

In your letter you state that 'The site is considered to be of high sensitivity and could present potential pollutant/contaminant linkages to controlled waters'. And, 'without these conditions, the proposed development on this site poses an unacceptable risk to the environment and we would wish to object to the application'. You then list the conditions.

- 2. As this site is on a slope leading towards the boreholes of Anglian Water and to the Heacham River, and the site will be 'managed' by just two workers, I would suggest the risk of contamination is greater than any mitigation the conditions might provide. Accidents happen, that is why they are called accidents; faults occur in systems; human error is difficult to design out. If Anglian Water's sources become contaminated then their systems might cut in before the public notice. If the Heacham River is contaminated all life within it will be adversely affected for a very long time the flow is low and contaminants are not easily flushed out. The Heacham River is recognised by the Environment Agency as an important chalk stream and money and time is being spent improving it.
- 3. I am of the personal opinion that BCKLWN has neither the personnel, time, or resources to ensure that the demanding conditions specified in your letter are met in a practical sense, checked before installation or use, or monitored for effectiveness over the life of the unit.

There is no scope for an event of 'low probability' so the risk posed by this unit on this site is too high. The only option is to remove the risk.

I urge the Environment Agency to reconsider its position and not grant a licence for this poultry unit.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 37 of 82

Summary of actions taken or show how this has been covered

1. The Environment Agency cannot comment on the procedures and decisions made by the planning committee as described above.

Site drainage has been assessed by the Environment Agency as part of the Permit determination and as described in section 4.6 of this document. To summarise:

- an assessment of the site drainage, including the risk to groundwater and surface water from potential pollutants from the Installation, has been undertaken;
- the Environment Agency has evaluated the Applicant's revised Site Condition Report together with the Applicant's submitted desk study and contamination report received at the same time; and
- the Environment Agency concludes that the information provided with the Application indicates that the potential risk to controlled waters from historic land contamination associated with the site is unlikely to be significant.

In addition, the ongoing risk of pollution of land and water from activities associated with the Application should be managed using appropriate pollution prevention measures and good site management.

The Environment Agency concludes that the measures in place will ensure that any contaminated water will be contained, and potentially lightly contaminated water has sufficient mitigation in place therefore no pollution of groundwater or surface water should occur as a result of operations at the Installation.

With reference to the conditions recommended to the planning authority by the Environment Agency and included in the planning permission granted in August 2016, we have responded to an application to discharge these conditions under planning, and recommended that the relevant conditions (land contamination and surface water drainage scheme) be discharged.

- 2. The Applicant has provided details of staffing levels in its response (received on 22 December 2016) to the Schedule 5 Notice (issued on 6 December 2016), along with further details of measures in place to ensure contaminated water does not enter the clean water drainage system, and in addition have supplied an Accident Management Plan which includes an out of hours emergency rota, detailing procedures in place when the site is not manned, such as remote monitoring of the Installation, an alarm system, and staff on rota to be within 2 miles of the Installation. Section 4.7 of this document provides further details. We are satisfied that the procedures in place are suitable to prevent or minimise environmental pollution in the event of an accident.
- 3. We cannot comment on the decisions taken by another body, and the assessment of any planning application and issues of resource and personnel is a matter for the relevant planning authority. We are satisfied that the Operator's proposals and procedures for operating the Installation are adequate. Compliance with the Permit will be monitored by the Environment Agency's local Environment Management team.

Additional information supplied in support of the Application, including the Schedule 5 response (referenced in table S1.2 Operating Techniques, via condition 2.3), forms part of the Permit. The Operator is required to comply in all respects with the requirements of the Permit, all relevant domestic and European legislation, and use Best Available Techniques (BAT). 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 www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-statement.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 38 of 82

Response received from

Heacham Parish Councillor (2nd response, same councillor, received 20/09/16)

Brief summary of issues raised

- 1. In your letter to the Borough Council of King's Lynn and West Norfolk you state that 'The site is considered to be of high sensitivity and could present potential pollutant/contaminant linkages to controlled waters'. And, 'without these conditions, the proposed development on this site poses an unacceptable risk to the environment and we would wish to object to the application'. You then list the conditions.
- 2. As this site is on a slope leading towards the boreholes of Anglian Water and to the Heacham River, and the site will be 'managed' by just two workers, I would suggest the risk of contamination is greater than any mitigation the conditions might provide. Accidents happen, that is why they are called accidents; faults occur in systems; human error is difficult to design out. If Anglian Water's sources become contaminated then their systems might cut in before the public notice. If the Heacham River is contaminated all life within it will be adversely affected for a very long time the flow is low and contaminants are not easily flushed out. The Heacham River is recognised by the Environment Agency as an important chalk stream and money and time is being spent improving it.
- 3. The possible contaminants include 1200 litres of oil; 12000 litres LPG; 875 litres biocides; 45kg rodenticides, 20 litres insecticides (all for one cycle of operation I believe). The last three of particular concern if they leach into the soil and water on site or off site (litter is intended to go on the land). The rodenticide is presumably to kill rats; what precautions are there to stop dying rats being eaten by wild predators such as barn owls which live in the area? And what would be the effect of biocides and insecticides entering the Heacham River. I suggest the healthy count (for example) of shrimp, olives and caddis fly would seriously decline and this would have adverse effects on the fish population including eels. Data about life in the Heacham River can be found on the Rivers Trust Website.
- 4. I am of the personal opinion that the site will not have the personnel, time, or resources to ensure that the demanding conditions specified in your letter are met in a practical sense, checked before installation or use, or monitored for effectiveness over the life of the unit.

There is no scope for an event of 'low probability' so the risk posed by this unit on this site is too high. The only option is to remove the risk. I urge the Environment Agency to reconsider its position and not grant a licence for this poultry unit.

Summary of actions taken or show how this has been covered

- 1. 2. and 4. Please refer to the summary of actions in the table above for similar comments received (17 August 2016) from the same councillor regarding site drainage, accidents, staffing and planning conditions.
- 3. The storage of potential contaminants on site meet the standards required such as bunding of fuel stores, and secure containment of chemicals. Section 4.6 of this document covers the Environment Agency's assessment of the risk to groundwater and surface water. The Environment Agency is satisfied that the measures in place will ensure that any contaminated water will be contained, and potentially lightly contaminated water has sufficient mitigation in place therefore no pollution of groundwater or surface water should occur as a result of operations at the Installation. With regard to rats, section 4.8 of this document contains our conclusions on pests.

Additional information supplied in support of the Application, including the Schedule 5 response (referenced in table S1.2 Operating Techniques, via condition 2.3), forms part of the Permit. The Operator is required to comply in all respects with the Permit, all relevant domestic and European legislation, and use Best Available Techniques (BAT). 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 www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-statement.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 39 of 82

Response received from

Heacham Parish Council (received 20/09/16)

Brief summary of issues raised

Similar points/concerns raised as in the two tables above for responses sent in by a Heacham Parish Councillor on 17/08/16 and 20/09/16, and summarised as follows:

- 1. Mention of conditions to be included in planning permission proposed by the Environment Agency.
- 2. Pollution of boreholes of Anglian Water and Heacham River.
- 3. Site only manned by two workers.
- 4. Potential pollution from fuels and chemicals stored on site.
- 5. Measures in place to prevent dead rats (killed by rodenticides on site) being eaten by wild predators (including barn owls).
- 6. Pollution of Heacham River causing a decline in shrimp, olives and caddis fly, which would have adverse effect on the fish population including eels.
- 7. Concerns that the site will not have enough personnel, time or resources to ensure permit conditions can be met, checked before installation or use, or monitored for effectiveness over the life of the unit.

Heacham Parish Council requests that the Environment Agency does not grant a licence for this poultry unit.

Summary of actions taken or show how this has been covered

Points 1-4, and 7 are similar to the comments received from the Heacham Parish Councillor detailed in the two tables above. Please see summary of actions sections for these points above.

- 5. The Applicant's proposed measures to prevent, or minimise the presence of pests on site are considered sufficient (please see section 4.8 of this document), and the Applicant has pest control measures in place, including baits to control rats should they appear. This should minimise the potential for other wildlife to be affected. In addition condition 3.6 is included in the Permit which requires the Operator to provide a Pest Management Plan should we require this.
- 6. The procedures and measure in place for the operation of the Installation should ensure that Heacham River is not polluted by operations on the site. Please see section 4.6 of this document.

Additional information supplied in support of the Application, including the Schedule 5 response (referenced in table S1.2 Operating Techniques, via condition 2.3), forms part of the Permit. The Operator is required to comply in all respects with the Permit, all relevant domestic and European legislation, and use Best Available Techniques (BAT). 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 www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-statement.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 40 of 82

Response received from

Snettisham Parish Council (received 17/08/16)

Brief summary of issues raised

Council supports Sedgeford Parish Council in its position.

1. Should the permission be granted, Council would be concerned that all relevant legislation is both regularly monitored, and efficiently enforced.

This applies particularly to environmental effects across the wider area. Potential pollution into the chalk river was of special concern given its special status.

Could you please confirm that these remarks will be entered into the process.

Summary of actions taken or show how this has been covered

1. Section 4.6 of this document considers potential pollution of surface waters. The Environment Agency is satisfied that the measures in place will ensure that any contaminated water will be contained, and potentially lightly contaminated water has sufficient mitigation in place therefore no pollution of groundwater or surface water should occur as a result of operations at the Installation.

The Operator is required to comply in all respects with the Permit, all relevant domestic and European legislation, and use Best Available Techniques (BAT). 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 www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-statement.

Response received from

Sedgeford Parish Council (received 23/09/16)

Brief summary of issues raised

Sedgeford Parish Council, on behalf of its residents would urge the Environment Agency to consider the following points when considering a licence for the above application. These points are made after councillors discussed the information provided to them in respect of the poultry units.

The points raised have been summarised below:

- 1. Concerns over contamination of Heacham River and bore holes in the area, which could affect the water supply to surrounding villages and on the wildlife in the river. Request for specific conditions to be put in place to ensure that this matter is protected and enforce against polluting emissions to water or land.
- 2. Concerns about the noise and odour that could be emitted from the site at times during the operation. Request measures and systems must be put in place to ensure these are kept to a minimum.
- 3. Request for the use of low level, low energy LED lighting on the site so it does not illuminate the night skies, and turned off at midnight.
- 4. Concerns about the storage and use of the waste materials from the site, stored in and around the village causing odour problems.
- 5. Request that consideration will be given to the impact on the many species of birds that live and graze in this area, especially the migratory species that visit every year, and urge controls are in place to ensure there is no significant increase in vermin as a result of the site.
- 6. All possible measures must be taken to preserve the environment to ensure leisure activities (walking, bird watching and general relaxation) in the area can continue without interruption from the proposed poultry units.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 41 of 82

7. Concerns about the possible effects on the health of local residents who suffer asthma and other breathing aliments, and hope that controls will be put in place to protect local residents from any emissions of dust etc. from the site that could be detrimental to their health.

The Parish Council has tried to outline the main concerns that they have along with those that have been expressed to them by residents in the locality of this operation. The Council urges the Environment Agency to consider these in their deliberations about the levels of control they need to impose in their permit to ensure that life in this area of West Norfolk has minimal disruption from the Poultry units proposed.

Summary of actions taken or show how this has been covered

- 1. This is similar to the comments received from the Heacham Parish Councillor and Heacham Parish Council detailed in the tables above. Please see summary of actions sections for these points in the tables above.
- 2. We have assessed the Application and supporting documentation and detail our assessment for odour and noise in the Key Issues sections 4.3 and 4.4 of this document. The Permit requires the Operator to protect people and the environment. We are satisfied with the measures the Operator has chosen to use to meet these objectives, thereby minimising potential impacts.
- 3. Impacts from light pollution are a matter for the planning authority. It does not form part of our decision making process. The Permit requires that the Operator takes appropriate measures to ensure that energy is used efficiently in the activities. The Applicant has confirmed in the Application that low energy lighting will be used in the houses, control areas and in other parts of the site. Condition 1.2 Energy Efficiency is included in the Permit and states:

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities; (b) maintain records of fuel and energy consumption used in the activities.
- 4. Concerns about the storage and use of the waste materials from the site, stored in and around the village causing odour problems: field storage of manure and land spreading outside of the Installation boundary are outside the remit of the Permit and are therefore not part of our assessment. If manure is exported from the site then it falls outside our regulatory remit unless it is waste*. Odour nuisance arising from land spreading of non-waste material would be dealt with by the Local Authority Environmental Health Department who may exercise their statutory nuisance powers where necessary. The surrounding land where manure may be stored and spread does not form part of the Installation, however the Permit includes the following condition covering disposal:
- 2.3.5 The operator shall take appropriate measures in disposal or recovery of solid manure or slurry to prevent, or where this is not practicable, to minimise pollution.

For this site, where the Operator will be spreading on land it owns, appropriate measure includes requiring a manure management plan. Please refer to section 'Slurry spreading and manure management planning - on-site activity' of EPR 6.09 'How to comply with your environmental permit for intensive farming', version 2.

*With regard to the characterisation of the poultry manure and dirty water collected on site and whether it is considered waste it is important to understand the following. Waste is any substance or object which the holder discards, or intends to or is required to discard. Wastes produced from agricultural and horticultural premises, often referred to as "agricultural wastes", are controlled to protect the environment and public health. The disposal of animal carcases is controlled by Animal By-Products legislation. There is no definitive list of agricultural waste but examples are vehicle and machinery waste, non-packaging plastics, plastic packaging, animal health products, building waste, cardboard and paper, metal, wood, glass, rubber, ash, and some hazardous wastes such as unused agro-chemical concentrates, oils, brake fluids, antifreeze, asbestos, lead-acid batteries, and fluorescent light tubes.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 42 of 82

Condition 2.3.5 is a standard permit condition that is present in all Intensive Farming permits and is applicable in this context.

Livestock manures are not waste if they are used to fertilise soil for agricultural or ecological benefit on agricultural land, whether on the farm where they are produced, or on another farm.

Further relevant information can be found here:
www.gov.uk/guidance/managing-nutrients-and-fertilisers
www.gov.uk/guidance/storing-organic-manures-in-nitrate-vulnerable-zones
www.gov.uk/guidance/using-nitrogen-fertilisers-in-nitrate-vulnerable-zones

- 5. Regarding the impact on birds that live and graze in this area, and controls in place to ensure there is no significant increase in vermin as a result of the site:
 - We consider that the Installation will have no likely significant effect on the habitats identified within the relevant screening distances of the Installation. A thorough explanation of our assessment can be found in section 4.1 (Ammonia emissions – ecological receptors) of the Key issues part of this document.
 - We also consider that in this determination, including through the ecological
 assessment described at section 4.1, we have taken appropriate steps to secure the
 preservation, maintenance and re-establishment of a sufficient diversity and area of
 habitat for wild birds in the United Kingdom.

We also use a consistent and risk based approach to screening the activities that we regulate or undertake ourselves to fulfil our statutory duties to protect and enhance the environment for wildlife. Our screening process involves making a balanced judgement about the environmental risks associated with each type of activity, against the sensitivity of the wildlife interest present in that location and based on best available evidence. Implementing this ensures that we comply with legislation, ministerial direction and our own guidance in a nationally consistent manner, properly consider all habitats and species of importance to the conservation of biological diversity in England and take adequate steps to avoid environmental damage or, where this is not possible, seek mitigation or compensation for impacts.

The Applicant's proposed measures to prevent, or minimise the presence of pests on site are considered sufficient (please see section of this document), and the Applicant has pest control measures in place, including baits to control rats should they appear.

- 6. With regard to preservation of leisure activities, the Environment Agency has had regard to the effect of the Installation on the economic and social wellbeing of local communities (in accordance with section 7 of the Environment Act 1995). 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 have a significant impact on the amenity of local residents.
- 7. Regarding concerns about the possible effects on the health of local residents, impacts on health from emissions from the Installation has been assessed as part of the Permit determination, in particular see Key Issues sections 4.2 Ammonia Human Health Impact Assessment and 4.5 Dust and Bioaerosols. 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 have a significant impact on the health of local residents.

Additional information supplied in support of the Application, including the Schedule 5 response (referenced in table S1.2 Operating Techniques, via condition 2.3), forms part of the Permit. The Operator is required to comply in all respects with the Permit, all relevant domestic and European legislation, and use Best Available Techniques (BAT). In the event that the Operator fails to comply with any Permit condition then we would consider

EPR/AP3439DZ/A001 Issued 13/07/17 Page 43 of 82

appropriate enforcement action in line with our Enforcement and Sanctions Guidance which can be viewed at www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-statement.

Response received from

Docking Parish Council (received 23/09/16)

Brief summary of issues raised

Docking Parish Council, on behalf of its residents would urge the Environment Agency to consider the following points when considering a licence for the above application. These points are made after councillors discussed the information provided to them in respect of the poultry units.

The points raised have been summarised below:

- 1. The site lies in a rural area and without stringent regulation could have detrimental effects on the environment both for humans and wildlife. The control over the use and disposal of water is key to the effective running of the site.
- 2. Concerns about the noise and odour that could be emitted from the site at times during the operation. Whilst not all odour and noise can be eradicated levels should be kept to a minimum to ensure least disruption to community life.
- 3. Request for the use of low level, low energy LED lighting on the site so it does not illuminate the night skies, and turned off at midnight.
- 4. Concerns about the use and storage of waste materials on and off site. The hope that in some part it can be controlled from within the permit.
- 5. Consideration of the impact on the many species of birds that live and graze in this area, especially the migratory species that visit every year.
- 6. Concerns about the possible effects on the health of local residents who suffer asthma and other breathing ailments. The Council hopes that controls will be put in place to protect local residents from any emissions of dust etc. from the site that could be detrimental to their health.

The Parish Council has tried to outline the main concerns that they have along with those that have been expressed to them by residents in the locality of this operation. The Council urges the Environment Agency to consider these in their deliberations ABOUT the levels of control they need to impose in their permit to ensure that life in this area of West Norfolk has minimal disruption from the Poultry units proposed.

Summary of actions taken or show how this has been covered

These concerns/comments are similar to issues already addressed in the tables above.

Additional information supplied in support of the Application, including the Schedule 5 response (referenced in table S1.2 Operating Techniques, via condition 2.3), forms part of the Permit. The Operator is required to comply in all respects with the Permit, all relevant domestic and European legislation, and use Best Available Techniques (BAT). 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 www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-statement.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 44 of 82

b) Representations from Community and Other Organisations

Representations were received from NoToPoFA Action Group, Norfolk Heights Management Ltd (Docking) and the Viva! Charity.

Response received from

No To Poultry Factory (NoToPoFa) Action Group (received 21/09/16)

Brief summary of issues raised

The No to Poultry Factory Action Group (NoToPoFa Action Group) was constituted at a public meeting attended by over 100 residents at the Sedgeford Village Hall on 29 March 2015 to represent the views of the community in the planning and operation of the proposed poultry unit.

NoToPoFa Action Group is making this submission not only on behalf of residents in Sedgeford, Docking and Fring, but also residents in the Parish Councils/Meetings of Bircham, Choseley, Dersingham, Heacham, Snettisham, Stanhoe, Thornham and Hunstanton Town Council, all of whom wrote formal letters of objection to planning application no. 15/02026/FM, to the Borough Council of King's Lynn and West Norfolk. NoToPoFa Action Group wishes the Environment Agency to take into account the following issues when considering the issue of an environmental permit:

- 1. Impacts on residents
- 2. Impacts on health
- 3. Impact on the local environment

We would also request that the most robust and appropriate measures are in place for the mitigation and monitoring of the identified risks.

The main concerns have been summarised as follows:

1) Impact on local residents

1.1 Concerns raised that unit would have a detrimental impact on residential amenity for the following reasons – noise, odours, pollution and health and wellbeing concerns.

The information originally submitted makes certain assertions that are untested in practice and based on academic studies rather than site specific atmospheric, topographic and geological conditions. The effects of odour, dust particle emissions and noise are likely to be detrimental to residential amenity and potentially represent a hazard to human health and welfare. Residents will be significantly adversely affected over a wide area, undermining their legal right to the peaceful enjoyment of their own property.

1.2 Odours

Concerns raised that intensive poultry production emits air pollutants that cause noxious odours such as hydrogen sulphide, endotoxins and ammonia, impacting on quality of life, reducing residents' ability to engage in gardening, family gatherings, cooking outside, visiting neighbours, drying laundry and general day-to-day living. It will also affect the enjoyment of holidaymakers particularly those engaged in normal outdoor countryside activities such as rambling, cycling and birdwatching.

Concerns raised about odours particularly at the end of the production cycle when the sheds are being emptied and cleaned out particularly in the summer when temperatures are high.

Concerns raised that odours from the spent litter being transported from the site to the areas when it will be stored locally and subsequently spread on the land or transported again when sold on.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 45 of 82

Concerns that the application's Odour Report is inadequate for a number of reasons. It is a formulaic computer model based on unreliable information, assumptions and averages which do not give reassurance about potential odours, instead it highlights the 'risk' of the proposed development. Furthermore, it does not include an assessment of the odours that may arise from the spent litter when it is stored and spread on fields.

Concerns were raised for in regard to the computer modelling, in particular:

The figures of the concentration of odours inside the buildings originate from literature, and not from the applicant's own measurements of existing intensive chicken farms of similar size.

An assumption in the Odour Report that each shed will be cleared in 2 hours, elsewhere it states 6-8 hours per shed or 3 to 4 days.

It does not give a model for the effect of odours during the peak emission.

It averages the levels, and acknowledges receptors may be exposed to short term concentrations which are higher than the hourly average

The report uses the 98th percentile figures which are hourly mean odour concentrations over a year.

Concerns also that there appears to be no Odour Management Plan supplied as part of the application, as required by the Institute of Air Quality Management (IAQM) in its Guidance for the Assessment of Odour for Planning.

Concerns that the report has insufficient data on likely magnitude of odour effect at specific receptor locations (i.e. local individual houses, schools, tourist and cultural locations etc.) No mention is made of the fact that these are all high sensitivity receptors. Neither does it appear to reach any conclusion on the likely significance of the effects.

In addition the Odour Report appears not to comply with the Environmental Impact Assessment requirements for a development of this scale.

Also research from poultry units elsewhere has shown amenity issues as a result of odour from poultry units.

1.3 Noise

Concerns raised that the Noise Assessment Report is inadequate as it does not include the impact of HGV movements along the route to and from the site.

Mention of a Planning Inspector upholding a decision on appeal against a similar sized poultry farm application with one of the key reasons being adverse impact on living conditions.

Concerns that the Plant Noise Assessment Report indicates that at night, for some of the nearest properties, the noise level of the roof vents, silo motors and HGV movements would exceed usual background sound levels. The report states that this is below permitted levels but, even if this were the case, it would still effect a material difference to those residents' quiet enjoyment of their homes, particularly in summer when noise levels would be higher due to increased use of the ventilation system and people would be more likely to be sitting out in gardens and having windows open. It is also when it would be peak tourist season.

Concerns of noise impacting on the users of the Peddars Way (a National Trail).

Concerns that the application includes information on the noise intensity of a single extractor fan, and fails to prove that the cumulative noise level associated with the development will be within reasonable and acceptable levels.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 46 of 82

2) Impact on Health

Concerns that the unit presents a number of serious risks to human health including respiratory illnesses, bacterial infections, antibiotic resistance and diseases which may build up on the unit. In addition the risks to the local community and economy from an outbreak of bird flu.

Concerns over the impact on health from dust particles from the unit., including chronic respiratory disease and asthma. In particular, the dust is a compound of faeces, chicken dander, mites, pathogenic bacteria, fungal spores, pesticides, veterinary medicines including antibiotics, ammonia and hydrogen sulphate .

Concerns for the health of children at Sedgeford and Docking Primary schools and older residents with respiratory problems, in particular from pathogenic bacteria such as MRSA, Salmonella, E. Coli and Campylobacter.

Concerns over dust and contaminants as a result of the track from the B1454 Sedgeford to Docking Road to the Poultry Unit not being fully concreted and drained.

Concerns over antibiotic resistant genes building up in local wildlife, soil and farm workers, and potentially everyone living locally, due to the frequent use antibiotics in chicken feed to control a wide range of conditions on intensive farms.

Reference to reports from the World Health Organisation (WHO) and the BBC, and further research from other countries regarding resistance to antibiotics for bacteria such as Escherichia coli, enterococci, salmonella, and staphylococci (MRSA) and campylobacter.

Concerns over recent outbreaks of bird flu.

All of these health risks will potentially affect residents of Sedgeford, Docking, Fring, Ringstead and the wider community, as well as users of the Peddars Way.

3) Impact on the local environment

3.1 Impact on Water Supply

Concerns over the Environment Agency's response to the planning consultation concluding that "The site is considered to be of high sensitivity and could present potential pollutant/contaminant linkages to controlled waters".

Concerns over contamination of ground water bore holes affecting local water supplies.

Concerns that the site is located within a Ground Source Protection Zone (Zone 2) and the manually operated valve which separates the clean and dirty water could contaminate the aquifer if operated incorrectly.

Concerns over the storage of manure for spreading on land at sites along the Thornham Road are located within a Ground Source Protection Zone (Zone1) which surrounds the bore holes which provide the drinking water to Ringstead, Old Hunstanton and Hunstanton itself.

Concerns of pollution from the site affecting the River Heacham, a valuable chalk river, and reference to a report from the Norfolk Rivers Trust.

The Heacham River is recognised by the Environment Agency as an important chalk stream and money and time is being spent by the Rivers Trust improving it for wildlife.

Concerns over the size of the dirty water collection tank in relation to local Met Office rainfall records.

Mention of the Environment Agency's Rainfall Runoff Management for Developments report

EPR/AP3439DZ/A001 Issued 13/07/17 Page 47 of 82

SC030219 with regard to surface water sewers capacity and the Technical Guidance to the National Planning Policy Framework advice when designing the system when the applicant has assumed a lower value of rainfall intensity.

Concerns over runoff from the site and chicken faeces stored on neighbouring fields would add to the nitrate impact on the land and aquifer.

3.2 Habitat/Ecology

Concerns that the site and the new concrete road from the B1454, covering a wide area, will have a detrimental impact on established flora and fauna through the loss of natural and undisturbed habitat, including barn owls, marsh harriers, hen harriers, curlew and lapwing (several of which are Red Status species), bats and hares, and established indigenous vegetation.

Concerns that a Habitat Survey for the proposed development was inadequate for a number of reasons; Pink Footed Geese were not considered as suggested in a previous scoping document, limitations caused by the season it was completed in, the impact of pollution on Barn Owls, Marsh Harriers was not considered, or the possible effects on other threatened species such as the Grey Partridge.

Reference to the Biodiversity Supplementary Planning Guidance for Norfolk (2004) identifying agricultural intensification as one of the key reasons for declining species numbers and population size, and habitat area.

3.3 Airborne Emissions

Concerns that the proposed poultry unit would impact on the environment through spreading of hazardous dust and gases from emissions from the poultry sheds, biomass boiler and traffic.

Concerns that there is no filtering system on the ventilation of the poultry houses to prevent dust particles entering the atmosphere.

The dust released is a compound of faeces, chicken dander, mites, pathogenic bacteria, fungal spores, pesticides, veterinary medicines including antibiotics, ammonia and hydrogen sulphate.

Reference to the Health and Safety Executive's Statement of Evidence on Respiratory Hazards of Chicken Dust regarding evidence that "the components of poultry dust are hazardous to health and the levels of dust exposure resulting from a range of poultry farming tasks, provide strong evidence for treating 'poultry dust' as a substance hazardous to health as defined in the Control of Substances Hazardous to Health Regulations 2002 (as amended) (COSHH)".

Reference to reports on similar operations elsewhere that have recorded high levels of airborne dust.

3.4 Character

Concerns that the proposed development would have a significantly detrimental impact on the landscape character of the area and cultural value. It will also negatively impact on the amenity of the wider environment. The unique character of the natural and tranquil landscape would be detrimentally affected both in the short and long term.

Concerns that the scale and nature of the proposed development is inappropriate for and out of keeping with the character of the local area.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 48 of 82

3.5 Historical Heritage Assets

Concerns that the proposed development, which is on the site of the Sedgeford First World War Airfield and also used as a decoy airfield in the Second World War, could cause the loss of archaeologically significant artefacts and previously unidentified heritage assets relating to earlier periods of activity at the site.

Summary of actions taken or show how this has been covered

- 1) Impact on local residents
- 1.1 The Environment Agency has assessed the Application and supporting information and is satisfied that the impact on local residents is not likely to cause harm to health. Please refer to section 4 of this document for assessment of odour, noise, ammonia and dust/bioaerosols.

1.2 Odour

As detailed in section 4.3 above, the Environment Agency has assessed the Applicant's proposal, including the odour modelling provided, and we are satisfied that operations will be carried out on the Installation in a way that minimises the risk of odour pollution. Section 4.3.3 in particular details our assessment of the Applicant's odour modelling, and our conclusions.

Inevitably assumptions must be made when modelling odour, and therefore model predictions are associated with a number of uncertainties. Predictions therefore are indicative only, and it is necessary to consider wider odour management at any site when making permitting decisions. A robust Odour Management Plan, together with an H1 odour risk assessment, submitted by the Applicant, has been assessed as described in sections 4.3.1 and 4.3.2 above.

Specific issues raised by the action group regarding odour modelling have been addressed as follows:

The point is raised that the model *'is a formulaic computer model based on unreliable information, assumptions and averages which do not give reassurance about potential odours, instead it highlights the 'risk' of the proposed development.*' The limitations of modelling is something that we are conscious of in our assessment. We recognise that there are a number of uncertainties associated with the application of odour dispersion modelling and the 98th percentile methodology for assessing impacts from poultry farms, not least the emission concentrations and variation with time which the action group mentions. Results can only ever be considered indicative, and the overall likelihood of odour pollution is determined based on a number of other factors including the odour management plan. We do not routinely request or require that applicants submit quantitative odour dispersion modelling assessments for intensive farm applications. Whilst they can in some cases assist with input into a decision, we do not rely on their outputs or conclusions alone.

In this case we have checked the measures proposed by the Applicant to control odour emissions set out in its odour management plan. The Operator will be required by the Permit to operate in accordance with the odour management plan. Once the operation of the Installation commences, there is also a requirement to review and record (as soon as practicable after a complaint) whether changes to the OMP should be made, make the appropriate changes to the OMP and adopt these further measures where required.

Consequently, we consider that the determination is taken on the basis of the best information available and that measures will be in place to ensure that the Installation is operated with a high level of protection of the environment as a whole, in particular by reducing odour emissions.

With regard to the point about the length of time modelled for clean out operations, the Applicant has included a 45 day cycle with days 41-45 having no emissions. Therefore it has assumed the houses will be empty during days 41-45. The peak emissions from vents during

EPR/AP3439DZ/A001 Issued 13/07/17 Page 49 of 82

cleaning out have been considered to be lasting for 2 hours on day 40. We are confident that the growth cycle we use for our sensitivity checks provides a conservative 98th percentile value. Furthermore, extensive sensitivity checks were carried out on growth cycle length and patterns are unlikely to have a significant effect on conclusions, particularly where receptors lie more than 200 m from the site. There are high uncertainties in odour dispersion modelling from farms and results only indicate the likelihood of complaints.

Most importantly in this case however, modelling cannot, and does not, model emissions from sheds representing the cleaning out phase. The dispersion modelling study only models emissions from the vents, and not from open doors during the clean out phase.

Although fugitive emissions from clean out operations are not modelled, the modelling is only one source of evidence for our decision, it is recognised that in any event the modelling is uncertain, and our sensitivity analysis does not indicate that inclusion of fugitive emissions would alter our conclusions on the modelling carried out.

Regarding the use of the 98th percentile, this is a statistical relationship which was developed based on odour from intensive farming and therefore its use in odour modelling assessments for intensive farming is appropriate. There is no other available methodology which has been validated to compare odour dispersion modelling predictions and annoyance.

As mentioned above, we are aware of the limitations of odour modelling and as such do not routinely request that it is submitted for permitting applications. Nonetheless, the consultant's modelling approach has followed our guidance and therefore is acceptable for consideration in the permitting process.

Although the letter makes reference to IAQM guidance, this guidance is not relevant for the permitting process and we expect the Applicant to follow our H4 guidance.

1.3 Noise

The Environment Agency has completed an audit of the Applicant's noise assessment report and additional information, taking into account concerns raised during consultation of the Application. Section 4.4.3 of this document provides more detail of our audit of the noise assessment report. The concerns raised above have been addressed as follows:

The Applicant has provided a description of the noise sources in section 3.2 of its noise assessment. The Applicant has only considered noise emitting plant and HGV movements within the Installation boundary, which is consistent with our information requirements. Noise emitted from vehicles travelling on the local road network are matters for the local planning authority when considering the planning application.

Also within section 3.2, the Applicant has identified that every broiler house will have 15 roof vents, which is a total of 120. Model software or spreadsheet calculations typically predict the noise level of individual sources then logarithmically sum the plant to calculate the specific level at receptors.

We cannot comment on planning decisions for other installations, we have based our assessment on site specific details for this Application.

As required in our information requirements, the Applicant has followed BS4142 which is a British Standard that outlines the methods for rating and assessing industrial and commercial sounds. The scope of BS4142 is to assess the likely effects of sound on people who might be inside or outside a dwelling or premises used for residential purposes. Considerations on local amenities or area specifically designated as an area of tranquillity, fall outside this scope of BS4142 and should be considered by the local planning authority under the National Planning Policy Framework.

The Applicant has applied for a permit to install 4 poultry units, each with 15 roof vents and 3 silo fans, and LPG fuelled boilers for heating the poultry houses. However, the assessment

EPR/AP3439DZ/A001 Issued 13/07/17 Page 50 of 82

submitted to support the Application was for more poultry units (8) and a biomass boiler for heating the poultry houses. We undertook sensitivity checks on the Applicant's assessment of the typical operation, based on the plant actually applied for, which indicate the specific level is below day-time and night-time background and can be considered low risk.

The Applicant's modelling did predict potential adverse impacts during the day-time at the nearest two receptors during typical operation and clear-out for an 8 poultry house proposal, with the associated additional roof fans, silos, biomass boiler and other plant. We have undertaken a detailed audit of the Applicant's assessment and have made a number of observations to which we have undertaken our own sensitivity checks.

For the clear-out the Applicant did predict potential adverse impacts at nearby receptors, however the Applicant has not considered the context associated with the impact, as outlined in BS4142. The night-time background and specific levels are below 30 dB(A), which we consider as very low, therefore we considered absolute levels against the WHO's night-time Likely Observed Adverse Effect Level (LOAEL). Our checks indicate that the absolute levels are well below the night-time LOAEL. Therefore, in line with the Noise Policy Statement for England (Department of the Environment and Rural Affairs (Defra), Noise Policy Statement for England (NPSE), March 2010) mitigation to minimise the effects are not required and we have modified the night-time impact to low.

Although we do not necessarily agree with the absolute numerical predictions given in the noise modelling report, we are satisfied that the manner in which operations are carried out on the farm will minimise the risk of noise pollution from the Installation.

2) Impact on Health

The Applicant is aware of the potential impacts on human health from air emissions from the broiler unit, (dust / bioaerosols, ammonia) and the risk of disease from birds; and has identified measures to prevent or minimise these emissions, as set out in its risk assessments and technical standards document. We have assessed the Application and supporting documentation and detail our assessment for odour, noise, ammonia and dust/bioaerosols in the Key Issues section 4 of this document.

The Permit requires the Operator to protect people and the environment. We are satisfied with the measures the Operator has chosen to use to meet these objectives, thereby minimising potential health impacts.

The Permit requires the Operator to operate the Installation in accordance with approved odour and noise management plans, and a management system that prevents or minimises the potential for pollution outside of the Installation boundary.

We have consulted Public Health England (PHE) and the Director of Public Health (Norfolk County Council) on the Application in line with our guidance. Please see PHE's response documented in Annex 1 section 1 above. PHE has not raised any concerns with regards to salmonella, campylobacter, MRSA or E. coli or other types of bacteria for this Installation. Further, regulatory controls are available to the appropriate authorities to address any serious incidences of disease such as bird flu or bacteria resistant to antibiotics should they arise.

In light of this we have completed our assessment based on the site-specific proposals, and our own research and assessment criteria. Comparisons to other sites and research completed for different scenarios mentioned in the action group's letter is less directly applicable to the Installation and given weight in our decision making accordingly.

- 3) Impact on the local environment
- 3.1 Impact on Water Supply

Section 4.6 of this document considers impacts from site drainage. The measures required to be in place by the Permit will ensure that any contaminated water will be contained, and

EPR/AP3439DZ/A001 Issued 13/07/17 Page 51 of 82

potentially lightly contaminated water has sufficient mitigation in place therefore no pollution of groundwater or surface water should occur as a result of operations at the Installation.

The procedures that the Permit requires to be in place also ensure the correct operation of the dirty water diverter valve. The use of a diverter valve in this way is a standard technique used by the intensive farming industry.

Field storage of manure and land spreading outside of the Installation boundary are outside the remit of the Permit and are therefore not part of our assessment. The surrounding land where manure may be stored and spread is not part of the Installation.

Condition 2.3.5 has been included in the Permit for slurry spreading and manure management. It states that the Operator shall take appropriate measures in disposal or recovery of solid manure or slurry to prevent, or where this is not practicable to minimise pollution.

The dirty water collection tank is considered to be of sufficient size to contain contaminated wash water during times of clean out, including any contaminated yard surface water during times of excess rainfall. It will be visually inspected to ensure it does not overflow, and can be emptied by tanker and/or clean out operations can be stopped should it be necessary.

3.2 Habitat/Ecology

Concerns over the land take associated with the Installation and the new concrete road from the B1454 are matters for the Local Authority planning authority.

Regarding the implications of the Installation for wildlife, including the species mentioned by the action group, we have had regard to the purpose of conserving biodiversity and to the need to take appropriate steps to secure the preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the United Kingdom.

We consider that the decision to grant the Permit respects these conservation objectives. In particular, we consider that the Installation is unlikely to have significant or damaging effects on the designated habitat sites identified within the relevant screening distances of the Installation. A thorough explanation of our assessment can be found in section 4.1 (Ammonia emissions – ecological receptors) of the Key issues part of this document.

3.3 Airborne Emissions

Consideration of the impact of emissions from the Installation has been given in section 4 of this document. In addition Public Health England has been consulted and their comments are included in Annex 1 section 1 of this document.

3.4 Character

Consideration of the location of the Installation in relation to affecting the landscape character of the area, cultural value and leisure activities in its locality, including the use of Peddars Way and the Norfolk Coast Path National Trails, is primarily a matter for the local planning authority. However, we have had regard to it in our determination of the Application. The Permit will regulate emissions such that there will be no unacceptable levels of pollution from the Installation. We therefore do not consider that emissions from the Installation could affect the landscape character of the area, the cultural value and leisure activities.

3.5 Historical Heritage Assets

Consideration of the historical heritage assets is primarily a matter for the local planning authority. However, we have had regard to it in our determination of the Application. The Permit will regulate emissions such that there will be no unacceptable levels of pollution from the Installation. We therefore do not consider that emissions from the Installation could cause the loss of archaeologically significant artefacts and previously unidentified heritage assets

EPR/AP3439DZ/A001 Issued 13/07/17 Page 52 of 82

relating to earlier periods of activity at the site.

An assessment of the potential contamination from previous uses of the land has been completed, please refer to section 4.6 of this document. The assessment included an evaluation of the Applicant's revised Site Condition Report together with the Applicant's submitted desk study and contamination report received at the same time. They concluded that the information provided with the Application indicates that the potential risk to controlled waters from historic land contamination associated with the site is unlikely to be significant.

The Operator is required to comply in all respects with the Permit, all relevant domestic and European legislation, and use Best Available Techniques (BAT). 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 www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-statement.

Response received from

Norfolk Heights Management Ltd (Docking) (received 21/09/16)

Brief summary of issues raised

As an (unpaid) Director of Norfolk Heights Management Ltd, I represent the owners and residents at Norfolk Heights Docking - a residential development on the Sedgeford Road, postcode PE 31 8PW. The development is just less than 2 km to the north east of the site of the proposed poultry farm. It comprises 22 residential units, of small cottages and flats. About fifty percent of the properties have full time residents, the remainder are used regularly as weekend or holiday cottages.

The Directors of NHML and the residents strongly object to this proposed development, on the grounds outlined below.

1. Odour pollution

There is a very strong likelihood that odours from the site will pollute the surrounding area. Paragraph 6.3.1 of the EIA states that "Any odours also will tend to be carried away from the site by the prevailing wind". This statement is a clear admission that properties, in particular those to the North East of the site (since the prevailing wind is from the South West, and the winds are extremely strong) will suffer odour pollution from this development.

2. Public Health/ pollution of the water course

We are very concerned at the risk of introducing harmful airborne pathogens into the environment. These will be carried directly downwind towards the residential properties North East of the site, including Norfolk Heights. There is a further concern that these pathogens could enter our public water supplies with resulting damage to health.

The EIA document states that "there needs to be an allowance for exceptional rainfall when the attenuation pond/ditch will come in to use." The recent storms in the North of the UK demonstrate that existing models of the effects of storm and flood are inadequate, and need to be revised. The current model, of a 30 minute exceptional storm in one in 100 years, is clearly inadequate and inappropriate, and must be reassessed. Docking's drinking water is drawn from the chalk aquifers in the area. There is no surface drainage on the chalk therefore all rainfall permeates the underlying chalk and there is, therefore, great concern that the introduction of harmful pathogens into the local environment so close to the extraction point could result in these pathogens entering the water supplies with consequential risk to public health in the area.

3. Impact on local ecology and wildlife

The whole area is a haven for wildlife. The recent State of Nature report highlighted the crisis (the author' word, not mine) in nature and wildlife in the UK. This development risks harm to

EPR/AP3439DZ/A001 Issued 13/07/17 Page 53 of 82

local wildlife from loss of habitat and potential contamination from the strong chemicals and antibiotics that will be used on the site.

Section 24 of the planning application states that the site is not visible from any public footpath or bridleway. This is incorrect – the site would be clearly visible from the Peddars Way, which is an important recreational attraction for locals and tourists alike.

There was very strong opposition to this proposal when it went before the Planning Committee, from a range of stakeholders, based on strong evidence and informed opinion. It is a matter of deep regret that the community's elected representatives ignored this overwhelming opposition, and either absented themselves from the discussion, or changed their minds and voted in favour.

Summary of actions taken or show how this has been covered

- 1. Odour pollution is considered in section 4.3 of this document. We are satisfied that the Installation will be operated so as to minimise the risk of odour pollution.
- 2. Public Health/ pollution of the water course is considered in section 4 of this document for ammonia, odour, noise, dust/bioaerosols and site drainage.
- 3. Impact on local ecology and wildlife is considered in section 4.1 of this document. See also the response to point 3.2 Habitat/Ecology and 3.4 Character in the table (summary of actions section) above for the NoToPoFa response.

Concerns over the planning application process are not relevant factors for our decision.

The Operator is required to comply in all respects with Permit, all relevant domestic and European legislation, and use Best Available Techniques (BAT). 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 www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-statement.

Response received from

Viva! Charity (received 23/09/16)

Brief summary of issues raised

On behalf of the national charity Viva! – and especially our supporters in the Norfolk area – I wish to formally object to the proposed development for eight broiler units on the greenfield site on Docking Road, Sedgeford and ask that you reject the request for an environmental permit.

A summary of grounds for rejection is as follows:

- 1. Transport: concerns over large numbers of HGVs used for the farm operations, which will increase traffic through Docking, which is already heavily usage, and narrow roads around the development are not suitable for this type of heavy traffic.
- 2. Noise: concerns about noise from HGVs during collections (especially at night) and continuous noise from ventilation fans and equipment.
- 3. Odour: odour issues from large scale intensive poultry units are well documented and have blighted many communities. It is our understanding that there will be around 360,000 birds on site at any one time. It will be difficult to limit the smell from the farm, especially as there are inhabited dwellings (including the local school) relatively close by that could be affected depending on temperature and wind direction.
- 4. Pollution: large scale factory farms such as the one described in this proposal generate a lot of waste and that can lead to run-off and pollution. Over the past ten years there have been a number of prosecutions of intensive livestock units for pollution of waterways

EPR/AP3439DZ/A001 Issued 13/07/17 Page 54 of 82

(especially from poultry farms). The proposal for a mega dairy in Nocton, Lincolnshire was rejected largely because it could not be guaranteed that the development would not lead to the pollution of the nearby underground aquifer.

- 5. Specific to this development, there are two important ground water bore holes, one in Sedgeford and one in Fring, which are both situated within 1.5 miles of this proposed development. There are four further ground water bore holes at Fring, which may also be affected. The water supply to the area could be compromised if these bore holes were affected in any way. The proposed site is located on an area high above the catchment area for the River Heacham, a valuable chalk river. I know there have been local concerns made that the Norfolk Rivers Trust have not been consulted on the impact this development could have on the surrounding area.
- 6. Also, Endotoxins, nitrous oxide, methane, carbon dioxide and aerial ammonia are all harmful emissions associated with broiler houses and will be of concern to local people.
- 7. Wildlife and visual impact: It is our understanding that the proposed site will built on a Greenfield site that in itself could have a serious impact on local wildlife. In addition, other objections have made note that the site is close to The Peddars Way (a famous historical pathway which could be severely blighted by this eyesore). English Heritage have made reference to this.
- 8. Special consideration should also be made to the decision of Breckland Council's Planning Committee (2 February 2015) which we understand was upheld by a Government Inspector to refuse approval for unauthorised development of a much smaller poultry unit (than this proposed site) near the Peddars Way. In a ruling (28th January 2015) we understand that the inspector concluded that 'the developments are harmful to the rural character of the area and its enjoyment for recreational users'.

Summary of actions taken or show how this has been covered

Points 1 and 2 for traffic and noise are similar to issues raised and addressed earlier in this document. Point 3 for odour has also been raised, but it should be noted that the Installation is for 168,000 broilers and not 300,000 as stated.

- 4. The comments concerning the Nocton Dairy Farm are noted. However, for the Installation, site drainage has been addressed as set out in section 4.6 of this document. We are satisfied that the measures required by the Permit to be in place will ensure that any contaminated water will be contained, and potentially lightly contaminated water has sufficient mitigation in place therefore no pollution of groundwater or surface water should occur as a result of operations at the Installation. The Application has been determined on a site specific basis therefore consideration of the Nocton Dairy Farm planning application has not been made.
- 5. Site drainage has been addressed in section 4.6 of this document. We have assessed the risk of pollution from the Installation and are satisfied that the measures required by the permit to be in place will ensure there is no pollution of local boreholes or the Heacham River. The Norfolk Rivers Trust has not responded to our public consultation and we do not consider it necessary to consult them specifically on this matter.
- 6. We have assessed the potential harm to human health in section 4 of this document concerning odour, ammonia, dust and bioaerosols and we are satisfied that the risk of harm to human health from dust, odour and ammonia is not likely to be significant. We have also consulted with PHE on the Application (see Annex 1 section 1 above). PHE have not raised any concerns with regards to specific risks to health from potential emissions of endotoxins, nitrous oxide, methane, carbon dioxide and aerial ammonia for this Installation.
- 7. Similar issues were raised in points 3.2 Habitat/Ecology and 3.4 Character of the NoToPoFa Action Group response in a table above, please refer to the summary of responses for this. In addition, the impact of ammonia on ecological receptors has been considered in section 4.1 of this document. Consideration of the location of the Installation in

EPR/AP3439DZ/A001 Issued 13/07/17 Page 55 of 82

relation to affecting the landscape character of the area, cultural value and leisure activities in its locality, including the use of Peddars Way is primarily a matter for the local planning authority. However, we have had regard to it in our determination of the Application. The Permit will regulate emissions such that there will be no unacceptable levels of pollution from the Installation. We therefore do not consider that emissions from the Installation could affect the landscape character of the area, cultural value or leisure activities.

8. Consideration of planning decisions for other sites are not relevant to the matters we must take into account concerning the Application, and do not form part of our decision making process for granting the Permit.

The Operator is required to comply in all respects with the Permit, all relevant domestic and European legislation, and use Best Available Techniques (BAT). 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 www.gov.uk/government/publications/environment-agency-enforcement-and-sanctions-statement.

c) Representations from Individual Members of the Public

Over 20 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
Restrictions on timing of clear out operations	
 Request for conditions in the Permit be included so that the clearing out process of the broilers at the end of each production cycle to be undertaken Monday – Thursdays only and not at weekends. Request for conditions in the Permit be included so that the clear out process not be undertaken before 7am to avoid disturbance to residential properties from vehicle movements causing an odour, noise and general disturbance nuisance. 	1 and 2. An assessment of the Application has been undertaken, including odour and noise modelling submitted in support of the Application. These have taken into account operations taking place at night. We do not consider it necessary or proportionate to include restrictions on the timings of the cleaning out process. As discussed in sections 4.3 and 4.4 of this document, based on the information in the Application, the odour management plan, noise management plan and the Permit conditions, we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise odour, noise and vibration beyond the Installation boundary and that activities are unlikely to give rise to significant pollution. 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.
<u>Odour</u>	
1. Concerns have been raised over the control of odour when the doors are opened and birds are being removed, when the	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

EPR/AP3439DZ/A001 Issued 13/07/17 Page 56 of 82

Brief summary of issue Summary of actions taken or show how this has been raised covered completed has taken in to account cleaning out operations. cleaning process begins and the spent litter is Land spreading outside of the Installation boundary are outside spread on surrounding the remit of the Permit and are therefore not part of our area. assessment. If manure is exported from the Installation then it ceases to be a matter for control (including concerning odour) under the Permit. Odour nuisance arising from land spreading may however, be dealt with under alternative regulatory regimes. Condition 2.3.5 has been included in the Permit for slurry spreading and manure management. It states that the Operator shall take appropriate measures in disposal or recovery of solid manure or slurry to prevent, or where this is not practicable to minimise pollution. For the Installation, where the Operator will be spreading on land they own, appropriate measure includes requiring a manure management plan. Please refer to section 'Slurry spreading and manure management planning - on-site activity' of EPR 6.09 'How to comply with your environmental permit for intensive farming'. version 2. The Applicant has confirmed that there will be no storage or spreading of poultry manure, slurry or wash water on site at any time. 2. Concerns have been 2 and 3. Odour modelling has considered sensitive receptors raised that odour risk up to 1000m from the Installation, and has included assessments only meteorological data and takes into consideration topology. The acknowledge problems Applicant's odour modelling has shown the impacts are within 400m of the site and predicted not to cause odour pollution at these sensitive local wind speeds have receptors and we agree with this conclusion. Please refer averaged 10 mph in July section 4.3 of this document above. with maximums of 70mph in January therefore odour will be carried by the wind to beyond 400m. 3. Concerns raised that the topography of the area will subject local resident downwind of the Installation to unacceptable levels of odour. 4. Concerns that odour will 4, 5 and 6. We have completed our assessment on the site be a problem as given in specific details and our own research and assessment criteria, documented evidence for therefore consideration of other sites, research papers and other sites. documented evidence is less directly applicable to the Installation and given weight in our decision making 5. Concerns that odour will accordingly. adversely affect the lives of people living in the vicinity The Applicant has provided a bespoke Odour Management as evidenced in published Plan as part of the Installation's management system to ensure research papers and press specific odour controls are in place for the particular animal reports. type and operating techniques at the Installation. 6. Institute of Air Quality IAQM planning guidance is not relevant for the permitting Management's (IAQM) process and we expect the Applicant to follow our H4 Guidance on the quidance. Assessment of Odour for

EPR/AP3439DZ/A001 Issued 13/07/17 Page 57 of 82

Brief summary of issue raised Planning states the level of	Summary of actions taken or show how this has been covered Section 4.3 of this document provides further detail regarding
assessment should be commensurate with the level of concern. Concerns raised that the model used in the assessment is inappropriate.	our assessment of odour.
Robust measures for residences beyond 400m	
Concerns that only robust measures should be in place if there are residences within 400m, and should be in place for residences within 1km to reduce risk of odour, noise and pollution and their consequent risks to health, well-being and enjoyment.	Consideration has been given to residences beyond the 400m trigger distance where odour and noise management plans are required. Odour and noise modelling submitted with the Application has considered the impacts at the nearest receptors (which are beyond the 400m distance quoted). Odour, noise and other pollution, such as ammonia, dust and bioaerosols, have been considered in section 4 of this document and we are satisfied that operations carried out on the Installation will minimise the risk of pollution beyond the Installation boundary.
Loss of amenity for residents	
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.	Traffic movements off site are not a matter within our remit when determining the Application. Regarding odour and noise, we are satisfied following a review of the information provided by the Applicant, and the conditions present within the Permit, that operations will not have a significant impact on the health or amenity of local residents.
Extended periods of hot weather	
Request for consideration to be given to further restrictions being imposed should we have a long hot summer similar to that of 1976. In such a situation the use of vast amounts of water for the clearing out process would be extremely wasteful and the likelihood of odour emissions would be high.	We are satisfied following a review of the information provided by the Applicant, and the conditions present within the Permit, that measures in place will ensure operations will not have a significant impact on the environment or local residents. Permit condition 1.3 'Efficient use of raw materials' requires the Operator to take appropriate measures to ensure that raw materials and water are used efficiently in the activities. In addition, the water used in the wash down process is small in comparison to supplying drinking water for the birds.
Waste water/chicken waste pollution	
1. Chicken waste has an offensive smell and has been advised that it is toxic to the environment in bulk.	1. An assessment of both odour and ammonia has been completed. This is set out in sections 4.1, 4.2 and 4.3 of this document.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 58 of 82

Brief summary of issue Summary of actions taken or show how this has been raised covered 2. Concerns have been 2. We are satisfied that the Permit will require that measures raised regarding the are in place to operate the diverter valve correctly to ensure manual operation of the that no dirty water enters the clean water drainage system. diverter valve, if operated incorrectly dirty water will go to the aguifer. 3. Concerns that in the 3. Dirty water will be disposed of off-site by land spreading and Applicant's description it will not be treated as sewage. 'Dirty water' is a term used for states that "dirty" water water draining from agricultural yards that has become lightly would be collected and fouled/contaminated. Dirty water can be treated or spread to taken off site agricultural land. for disposal. On page 5, it states that this water "can be stored during dirty conditions and removed as required by a licensed contractor". This implies the water is being treated as sewage and treated elsewhere in safety. 4. Concern that no 4. This appears to be a reference to documentation for the response to items 8j and planning application. As such this documentation and whether 8k (reference Brown & there has been a response to it has not been taken in to Co's email 28/07/16) was account during our determination of the Application. given by the Applicant or Newcombe-Baker Farms Limited will be the Operator of the agent, and presumes this Installation, and the Permit includes Condition 2.3.5 which was because they are not states that the Operator shall take appropriate measures in the operators of this site. disposal or recovery of solid manure or slurry to prevent, or where this is not practicable to minimise pollution. For this site, however poultry manure, slurry and/or waste water where the Operator will be spreading on land they own, will be spread on land appropriate measures include requiring a manure management owned by Newcombe plan. Please refer to section 'Slurry spreading and manure Baker Farms. management planning - on-site activity' of EPR 6.09 'How to comply with your environmental permit for intensive farming', version 2. 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. Waste disposal / Land spreading 1. Field storage of manure and land spreading outside of the 1. Concerns that reference Installation boundary are beyond what the Permit may control to waste disposal has been vague and varied, and and are therefore not part of our assessment. The surrounding request that any spreading land where manure may be stored and spread is not part of the Installation. It is not necessary or proportionate to include of waste should not be

EPR/AP3439DZ/A001 Issued 13/07/17 Page 59 of 82

Installation.

restrictions on the timings of the operations carried out at the

undertaken at weekends,

undertaken at school drop

and deliveries or collections not be

Brief summary of issue Summary of actions taken or show how this has been raised covered off/collection times. 2. The Applicant had 2. Consideration of use of public highways is a matter for consideration during the planning process and is not previously agreed to avoid the use of public highways something that may be controlled via the Permit. for the transport of waste litter to storage compounds/locations. using his own private farm access tracks/roadways for such transportation. This would be welcomed. 3. Concerns that the 3. Land spreading outside of the Installation boundary is not disposal of manure from something that may be controlled by the Permit and therefore the unit to surrounding does not form part of our assessment. The surrounding land farmland will increase the where manure may be stored and spread is not part of the levels of nitrates in the soil Installation. which could permeate into the neighbouring The Environment Agency actively works to protect and improve waterways. Norfolk has the nation's watercourses including Norfolk's chalk rivers. This 10% of the world's chalk includes via the Nitrate Pollution Prevention Regulations 2015, rivers, which are renowned which govern the spreading of agricultural fertilisers in areas for their huge species due designated Nitrate Vulnerable Zones. to clear calcium-rich water and gravel beds where fish can lay eggs. These rare habitats can easily be destroyed. The rivers under threat are River Hun. River Ingol and especially the River Heach whose source is in Sedgeford. 4. Concerns raised over 4. Field storage of manure and land spreading outside of the Installation boundary are not matters that may be controlled by the disposal of spent litter and dirty water on the Permit and are therefore not part of our assessment. The surrounding farmland, surrounding land where manure may be stored and spread is not part of the Installation. Condition 2.3.5 of the Permit states which is nitrate sensitive area and ask what that the Operator shall take appropriate measures in disposal regulation will be invoked or recovery of solid manure or slurry to prevent, or where this to avoid contamination of is not practicable to minimise pollution. For this site, where the Operator will be spreading on land they own, appropriate the surrounding aquifers and the important chalk measures include requiring a manure management plan. stream, the River Please refer to section 'Slurry spreading and manure Heacham. management planning - on-site activity' of EPR 6.09 'How to comply with your environmental permit for intensive farming', version 2. The Environment Agency actively works to protect and improve the nation's watercourses including Norfolk's chalk rivers. The Nitrate Pollution Prevention Regulations 2015 specifically govern the spreading of agricultural fertilisers in areas designated Nitrate Vulnerable Zones. We are satisfied that the risk of significant pollution from emissions of surface water from the Installation is not likely.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 60 of 82

Brief summary of issue raised	Summary of actions taken or show how this has been covered
Noise 1. Concerns raised about	Section 4.4 of this document sets out how we have
the continuous noise from the large extractor fans, in particular impacting on residents of Littleport cottages	approached the noise impact assessment.
2. Concerns that noise will adversely affect the lives of people living in the vicinity as evidenced in published research papers.	2. We have completed our assessment on the site specific proposals, and our own research and assessment criteria and therefore consideration of other research papers is less directly applicable to the Installation and given weight in our decision making accordingly.
3. Reference to BCKLWN's Local Plan, particularly paragraphs 9.83 and 9.84 and Policy 9/31 with regard to noise issues.	3. This appears to be a reference to local planning policy and as such has not been taken in to account during the determination of the Application. 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.
4. Concerns that the Applicant's noise modelling is inaccurate.	4. We have undertaken a detailed audit of the Applicant's assessment and have made a number of observations which we have undertaken our own check sensitivity to. We are satisfied that the Applicant's conclusions can be used for the basis of permit determination. These state that there will not be a significant adverse impact at receptors from typical operation.
Access road from B1454 to installation	
1. Concerns that, apart from the first 15 metres from the B1454, the remaining pathway to the Installation is unmade farm track, therefore request for this to be properly surfaced and drained for the full length to prevent ground pollution and dust.	1 and 2. The access road from the B1454 to the Installation is outside the Installation boundary and therefore does not form part of the determination of the Permit. It may have been considered in the planning process.
2. Concerns that the Applicant does not appear to have any plans to upgrade the track from the main road to the sheds, and the current track is not capable of carrying HGVs on a frequent regular basis.	

EPR/AP3439DZ/A001 Issued 13/07/17 Page 61 of 82

Brief summary of issue Summary of actions taken or show how this has been raised covered **Groundwater source** protection zones 1. Concerns over the 1 and 2. Field storage of manure and land spreading outside of storage of waste matter on the Installation boundary are not matters which the Permit can the Thornham Road. control and are therefore not part of our assessment. The surrounding land where manure may be stored and spread is currently in use by the Applicant, is located within not part of the Installation. a Groundwater Source We are satisfied that activities at the Installation will not cause Protection Inner Zone 1 significant pollution, in particular the measures in place for the and existing boreholes, which provide drinking collection of dirty water and removal from the Installation. water for Old Hunstanton, Section 4.6 of this document provides further detail on site Hunstanton and Heacham. drainage. In addition the Installation is located within a **Groundwater Source** Protection Zone 2 of the boreholes. 2. Concerns include the waste storage locations and management, and the adequacy, collection and removal of dirty water after each production cycle. Complaints procedures and contact details 1. Request for contact 1. The Environment Agency is able to receive complaints through the incident hotline (telephone number 0800 80 70 60). information and complaints or by letter. Our recommended method is via the incident procedure regarding environmental issues. hotline for efficiency (we advise that complainants should not use e-mail to report an incident, as this could delay our response). The Environment Agency commits to responding to incidents. We try to respond where we can (provided the complaints are not isolated anonymous complaints), and undertake proactive monitoring if it is deemed necessary in order to substantiate the nature, origin and extent of the odour complaint. 2. The Environment Agency monitors the Operator's 2. Who will monitor complaints records as part of compliance and routine incident complaints. response commitments. 3. Will transport 3. Off-site traffic is a relevant consideration for the granting of disturbance and noise planning permission, but does not form part of our come under the determination of the Application. On site noise including that generated by traffic is relevant for environmental issues. our determination and has been considered elsewhere in this document (see Key Issues, section 4.4). 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 noise emissions from the Installation will not have a significant impact on the surrounding locality or disruption to local residents.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 62 of 82

Brief summary of issue raised	Summary of actions taken or show how this has been covered
Control of smells and aerial bio hazards	
Concerns have been raised over the lack of provision of filters on the large extractor fans on the sheds, in view of the close proximity to the villages of Sedgeford and Fring, and concerns over the smells and release into the air of a toxic combination of bio hazards such as bacteria, viruses, toxins, ammonia, antibiotics, dander and faecal matter. The health of local residents and primary school should be seriously considered.	As discussed in the Key Issues sections of this document for odour, ammonia, dust and bioaerosols we are satisfied, following review of the information provided by the Applicant that the risk of harm to human health from emissions form the Installation, including dust and bioaerosols, odour and ammonia, is not likely to be significant. We have also consulted with PHE on the Application and they have not raised any concerns regarding emissions such as dust and bioaerosols (please see Annex 1 section 1 above). The Permit includes condition 3.2 to control emissions of substances not controlled by emission limits, such as dust and bioaerosols. The Operator has to manage its activities so that these emissions shall not cause significant pollution.
Environmental effect on rural area due to drainage from site	
Concerns have been raised over the environmental effect that an industrial development in a very rural area will have on the surrounding countryside, rivers and settlements with regard to drainage, and in particular to Heacham River downhill from the site.	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. Section 4.6 of this document provides further information regarding drainage from operations at the Installation. 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.
Scale, location and land use	
1. Concerns have been raised about the scale of the poultry unit being an industrial development which is unsuitable for this particular location, which is a rural area encompassing sites of 'outstanding natural beauty'.	1, 2 and 3. Scale, location and land use is a matter for consideration during the planning process and does not form part of the Permit decision. Section 85 of the Countryside and Rights of Way Act 2000 imposes a duty on Environment Agency to have regard to the purpose of conserving and enhancing the natural beauty of areas of outstanding natural beauty (AONB). There is no AONB which could be affected by the Installation.
2. Concerns have been raised over the effect that an industrial development will have on the local residents, both in Sedgeford and also those living or visiting the	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. We are satisfied that the risk of activities at the Installation will not have an unacceptable impact on the health of local residents.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 63 of 82

Brief summary of issue raised	Summary of actions taken or show how this has been covered
surrounding villages. 3.Description of area from The National Character Area Profile for N. W. Norfolk quoted, describing the area as 'the most tranquil countryside in the county' with 'long distance panoramic and open views across farmland', therefore this development would spoil the nature and tranquillity of the area.	
Staffing of site Concerns raised that only 1 or 2 people will be working on the site and accidents can happen. Assurances sought that the proper procedures will be strictly enforced at all times and regular checks will be carried out by the Environment Agency.	The Applicant has confirmed the level of staffing and measures in place in the case of emergencies in its response to a Schedule 5 Notice received on 22 December 2016. Section 4.7 of this document provides more detail. We are satisfied that the procedures in place are suitable to prevent or minimise environmental pollution in the event of an accident.
Monitoring of the site	
1. Concerns have been raised about whether there will be adequate monitoring of the site due to only one full time worker at the site and annual budget cuts at the Environment Agency in recent years.	1. The Applicant has confirmed the level of staffing and measures in place in the case of emergencies in its response to a Schedule 5 Notice received on 22 December 2016. Section 4.7 of this document provides more detail. We are satisfied that the procedures in place are suitable to prevent or minimise environmental pollution in the event of an accident. The Installation will be inspected by the Environment Agency to ensure compliance. Any non-compliance will be dealt with in accordance with our published Enforcement and Sanctioning Guidance.
2. Will auditing/monitoring results from the site be available to the public.	2. Compliance Assessment Reports are produced following routine Environment Agency inspections which are put on the public register. 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 60 of the Permitting Regulations in relation to monitoring, must be put on our public register.
	This includes Compliance Assessment Reports.
Secrecy of operations	The Application was advertised as set out in section 2.2 of this
Why is there great secrecy surrounding this method of	document. The Application and supporting documents, and

EPR/AP3439DZ/A001 Issued 13/07/17 Page 64 of 82

Brief summary of issue raised	Summary of actions taken or show how this has been covered
food production?	Schedule 5 responses, which include details of the operations at the Installation are available to view on the Environment Agency's public register.
Ammonia	
Concerns have been raised on the effect of ammonia on the surrounding atmosphere causing an unpalatable smell and also the potential for acid-rain falling over agricultural land.	An assessment of both odour and ammonia has been completed Sections 4.1, 4.2 and 4.3 of this document detailing how these assessments have been carried out. Acid deposition is taken in to account as part of the ammonia assessment (section 4.1 of this document).
Effect on human health from salmonella, campylobacter, MRSA and E. coli	
1. Concerns have been raised regarding the greater risk of emissions and/or effluents damaging the health of those who live in the area from exposure to airborne dust contaminated with pathogens such as salmonella, campylobacter, MRSA and E. coli, causing asthma and chronic bronchitis. The area has a high proportion of elderly retired people with existing medical conditions such as COPD (chronic obstructive pulmonary disease) who could be greatly affected by such emissions. 2. Concern that research from Cambridge University has shown the majority of supermarket chickens from intensive farming units are contaminated with campylobacter and should be handled very carefully prior to cooking.	1 and 2. As discussed earlier in this document, we are satisfied that the risk of harm to human health from emissions of dust, odour, noise and ammonia are not likely to be significant. We have consulted Public Health England (PHE) and the Director of Public Health (Norfolk County Council) on the application in line with our guidance. Public Health England and the Director of Public Health have not raised any concerns with regards to salmonella, campylobacter, MRSA or E. coli. Please see PHE's response documented in Annex 1 section 1 above.
Avian/bird flu	
1. Concerns have been raised with regards to avian flu and the threat from wild birds. Pink footed geese fly in large flocks	1. We have consulted Public Health England (PHE) and the Director of Public Health (Norfolk County Council) on the Application in line with our guidance. Public Health England and the Director of Public Health have not raised any concerns with regards to avian flu and transmission to humans. The

EPR/AP3439DZ/A001 Issued 13/07/17 Page 65 of 82

Brief summary of issue raised

Summary of actions taken or show how this has been covered

along the Sedgeford valley to feed on the fields. They will be attracted to the spilled grain around the sheds and can spread avian flu. primary regulator for animal health is the Animal and Plant Health Agency (APHA), whose primary purpose is to help safeguard animal health and welfare and public health. Therefore they are primarily responsible for ensuring the farming industry has measures in place to effectively deal with any disease outbreaks on site.

The Permit ensures that measures are in place at the Installation to minimise the risk of feed spillage. Feed is stored on the Installation in silos adjacent to the poultry houses, positioned away from site traffic, The delivery of feed into the bins and from the bins to the birds will be via enclosed conveyor systems. The feed is blown from bulk trailers into the silos, an auger system will then convey feed to pan feeders. Dust from bulk blowing into silos is controlled by the means of dust collection units on the exhaust vent pipes.

2. Concerns over the effect on business if the area is in lock down due to bird flu issues.

2. The Environment Agency does not consider that the Installation poses a significant risk to local businesses as a consequence of bird flu issues, sufficient to justify refusing a permit or imposing additional conditions on the Permit.

Use of antibiotics

Concerns have been raised that there have been numerous objections to the proposal from members of the medical profession, including one from an eminent A & E consultant based at a local hospital who raised concerns at the increasing use of antibiotics routinely used in poultry factories for disease prevention, which leads to a reduction in the effect of important antibiotics in human medicine, and that there are many drug resistant bacteria as a result of overuse of antibiotics in farming.

The use or overuse of antibiotics in poultry farms is not a matter for control by the Permit.

Further, we have consulted Public Health England (PHE) and the Director of Public Health (Norfolk County Council) on the Application in line with our guidance. Public Health England and the Director of Public Health have not raised any concerns with regard to drug resistant bacteria.

Effect on human health from night-time activities

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.

The risk of pollution posed by noise emissions from the site has been assessed as part of this determination. Based upon the information in the Application, the noise management plan 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

EPR/AP3439DZ/A001 Issued 13/07/17 Page 66 of 82

Brief summary of issue raised	Summary of actions taken or show how this has been covered
	4.4 of this document.
Effect on human health from extra traffic movements	The legal planning outhority is responsible for determining land
Concerns that extra traffic, and in particular Heavy Goods Vehicles (HGVs), will pose a risk to human health.	The local planning authority is responsible for determining land use through the planning application process, this includes transport. Consideration of increased traffic movements beyond the Installation boundary does not form part of our determination of the Application.
Effect on human health from dust/particulate emissions	
Concerns that the emissions of dust/particulate matter that emanate from these sites are harmful to humans.	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. As a result 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.
	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.
Effect of the activities of the Installation on local school children.	
Concerns that the children of local schools in both Sedgeford and Docking, could be affected, in particular with regards to dust, odour and traffic flow.	As discussed in this document we are satisfied that the risk of pollution of the environment and harm to human health from dust, odour, noise and ammonia are unlikely to be significant. We have also consulted with PHE on the Application and they have not raised any concerns (see Annex 1 section 1 above).
	With regards to the impact of traffic outside the Installation boundary, this is a relevant consideration for the grant of planning permission, but does not form part of our determination of the Application.
Effect of the activities of the Installation on sufferers with existing chronic conditions	
Concerns have been raised as to the impact of the Installation of people with asthma and other respiratory conditions.	As discussed in this document we are satisfied that the risk of pollution of the environment or harm human health from emissions of dust, odour, noise and ammonia are not likely to be significant. We have also consulted with PHE on the Application and they have not raised any concerns (see Annex 1 section 1 above).
	1

EPR/AP3439DZ/A001 Issued 13/07/17 Page 67 of 82

Brief summary of issue raised	Summary of actions taken or show how this has been covered
<u>Light Pollution</u>	
Concerns of the impact of light pollution on local residents.	Light emissions from the Installation do not form part of our determination of the Application. It may be something considered by the relevant planning authority.
Control of operations at the site	
Concerns have been raised that the operation will be managed by a third	1 and 2. The Installation will be operated by Newcome-Baker Farms Limited, the Operator of the Permit.
party (Banham Poultry) who have given no details to date concerning the day to day running of the facility.	Newcome-Baker Farms Limited established links with Banham Poultry Limited in the early stages of the proposal and we understand Banham Poultry Limited will be the processor of the poultry to be produced by Newcome-Baker Farms Limited when it has left the Installation. Banham Poultry Limited have worked closely with Newcome-Baker Farms Limited in
2. Query over who the Permit is actually being granted to, Newcome-Baker Farms, their agent (Acorus) or Banham Poultry.	formulating the proposal. The Permit requires that the day-to-day running of the farm will be the responsibility of appropriately skilled and experienced staff. Newcome-Baker Farms Limited proposes that this includes a site manager who will be approved by Banham Poultry Limited and employed by Newcome-Baker Farms Limited.
	We understand that Newcome-Baker Farms Limited asked Acorus Rural Property Services to collate an Environmental Statement to be used in conjunction with its proposed planning application to erect poultry buildings on land at Whin Close, Sedgeford.
3. The original application was for 8 sheds and included employee accommodation on site, but this is no longer the case therefore there is no information on what remedial actions will be in place if there is an accident during hours the site is not manned.	Section 4.7 of this document explains the measures in place to deal with an accident during hours the Installation is not manned.
Dirty water tank size	
Concerns were raised regarding a discrepancy in the size of the dirty water collection tank, given as	1. The Applicant confirmed in its response to a Schedule 5 notice received on 22 December 2016 that the dirty water tank will be 48,000litres.
43,000 in the Application and 48,000 litres in the site plan. Furthermore the clean & dirty water disposal procedure states that over	The volume of water created during clean out is on average 475 litres of washings per 1,000ft² of floor area. Over a floor area of 79,000ft² this equates to 79.2*475ltrs = 37,620ltrs/crop. This therefore leaves 48,000 - 37,620 = 10,380ltrs capacity.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 68 of 82

Brief summary of issue raised a single day the volume of water needing to be temporarily stored will be

Summary of actions taken or show how this has been covered

a single day the volume of water needing to be temporarily stored will be 60 cu. metres (13,000 gallons). This equates to 59,000 litres when the maximum capacity of the tank is 43,000 litres or 48,000 litres, a shortfall of 16,000 litres at worst.

Other industry figures are 8,000ltrs per 300x66ft shed. This would equate to 32,000ltrs/ crop.

The collection tank is of sufficient size to contain all wash waters during extreme weather and the Operator is required to visually inspect it to ensure it does not overflow. The Permit requires that measures are in place to ensure the diverter valve is in correct position to divert dirty water to the tank prior to commencement of clean out. All wash water inside the poultry houses goes straight in to the dirty water drainage system and on to the dirty water collection tank. Should it be required during times of excess rainfall, the dirty water tank can be emptied by tanker and mucking out operations be done at the discretion of the site manager, ensuring only clean water enters the clean drainage system.

2. Concerns were raised over if the Applicant is getting such things wrong at the Application stage, how we can be confident that procedures would be followed and cleaning out stopped when a tight timeline is to be met.

2. We have assessed the Application thoroughly and requested further information in the form of two Schedule 5 Notices which have clarified discrepancies in relevant information.

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's Enforcement and Sanctions Guidance.

Traffic

Concern has been raised on the increased levels of traffic movement due to the presence of the Installation, particularly the increase in HGV movements.

Off-site traffic movements does not form part of our determination of the Application. It may, however, be a relevant consideration for the grant of planning permission.

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). 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 that noise emissions from the Installation impact on the surrounding locality or cause disruption to local residents.

<u>Dust</u>

General concerns have been raised about dust that could emanate from the site as a result of the activities. 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 and therefore emissions of dust are unlikely to be significant.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 69 of 82

Brief summary of issue Summary of actions taken or show how this has been raised covered **Use of chemicals** Based on the information in the Application, we are satisfied Concerns have been that proposals for raw materials including chemicals used and raised over the use of storage are appropriate. chemicals and any harmful effects they may have on the site and surrounding We are also satisfied that appropriate measures are in place to prevent and or minimise fugitive emissions, including fugitive area, nearby residents and emissions of raw materials. We require the Applicant to name wildlife, and possible the quantities and names of all of the raw materials. In addition contamination of ground we assess the risk of pollution from storage and use of the raw water and water courses from the unit. materials. In the case of an intensive farm installation such as this we assess the environmental risk of storage and use of the relevant raw materials as low. The storage of potential contaminants on site meet the standards required such as bunding of fuel stores, and secure containment of chemicals. Section 4.6 of this document provides further details of the Environment Agency's assessment of the risk to groundwater and surface water. The Environment Agency is satisfied that the measures in place will ensure that any contaminated water will be contained, and potentially lightly contaminated water has sufficient mitigation in place therefore no pollution of groundwater or surface water should occur as a result of operations at the Installation **General environmental** concerns An assessment on the potential impacts from the Installation Concerns have been on nature conservation sites was carried out as part of our raised over a negative determination of the Application. Section 4.1 of this document effect on local flora and sets out our conclusions from this assessment in more detail. fauna. Impact on local wildlife Concerns that within the An assessment on the potential impacts from the Installation planning application there on nature conservation sites was carried out as part of our determination of the Application. Section 4.1 of this document was no definitive information on the impact sets out our conclusions from this assessment in more detail. on Pink Footed Geese and Our responses to point 3.2 Habitat/Ecology and 3.4 Character in the table (summary of actions section) above for the other ground breeding NoToPoFa response in Annex 1 section 2b are also relevant. birds, with information being inadequate and this is unacceptable given the site's close proximity to two RSPB sites and the risk of cross contamination to birds at both Snettisham and Titchwell reserves with potential to spread to much greater areas when the birds migrate from the Wash. Request for a more

EPR/AP3439DZ/A001 Issued 13/07/17 Page 70 of 82

Brief summary of issue raised	Summary of actions taken or show how this has been covered
comprehensive habitat survey and expert view of the potential impact on the Pink Footed Geese before the Application can be considered.	
Concerns raised that the site will be built on a Greenfield site which could have a serious impact on local wildlife.	
Concerns raised by RSPB for planning application	
Concerns were raised that the RSPB concerns raised during the planning application regarding the siting of the unit were not addressed by either the Applicant or the planning authority.	The Environment Agency cannot comment on issues related to the planning application and how these were addressed during that process as these are a matter for the local planning authority. The RSPB has not expressed any concerns to the Environment Agency as part of our determination of this Application.
Consultation of application	
Concerns were raised that Norfolk Rivers Trust has not been consulted on the impact this development could have on the surrounding area	Section 4.6 of this document provides further information regarding drainage from operations at the Installation. The Environment Agency has consulted with relevant external bodies and advertised the Application for public consultation. The Norfolk Rivers Trust has not responded to our public consultation and we do not consider it necessary to consult them specifically on this matter.
Pests	
1. Concerns have been raised about the impact of pests (including flies and rats) on the surrounding area from the Installation.	1, 2 and 3. Based on the information in the Application, we are satisfied that appropriate measures will be in place to prevent and/or minimise pests. Section 4.8 of this document sets out our conclusions regarding the management of pests in greater detail.
2. Concerns have been raised that rats are able to squeeze through very small holes and will be interested in the food source, and are a risk of infection to birds and the local community.	
3. Concerns were raised that flies, rodents and other	

EPR/AP3439DZ/A001 Issued 13/07/17 Page 71 of 82

Brief summary of issue raised	Summary of actions taken or show how this has been covered
pests will adversely affect the lives of people living in the vicinity as evidenced in published research papers.	
Carcass management	
Concern has been raised on the procedure for the handling, storage and removal of dead birds.	1, 2 and 3. 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.
2. Concerns were raised that dead birds would be disposed of in the surrounding fields with the chicken waste, which would result in a higher nitrate concentrate. 3. Concerns were raised regarding the handling, storage and disposal of approximately 50,000 dead chickens per annum (based on an industry average of 3.5% per cycle) and health implications regarding their storage. A request was made to insist on refrigerated storage emptied regularly.	The Applicant has confirmed that any fallen stock will be collected and recorded daily. Carcasses will be stored in purpose built, locked bins. Carcasses are collected twice weekly and bins are treated with an odour neutraliser. These will be collected regularly by a licensed contractor under the Animal By-Products Regulations (S3.2 of EPR 6.09 'How to Comply with your environmental permit for intensive farming', version 2). The Permit (specifically condition 1.1) will require that these steps are adhered to. The Odour Management Plan states that, following each site depletion, carcass bins are washed and disinfected to avoid any build up, washing will directing to underground holding tanks and removed along with the wash waters. Carcass bins are also to be located away from any sensitive receptor and where possible stored in a cool shaded areas, as detailed in the Applicant's management systems. This is in accordance with S3.2 of EPR 6.09 'How to Comply with your environmental permit for intensive farming', version 2. The Odour Management Plan is a stated operating technique, which the Applicant must comply with by virtue of Table S1.2
	and condition 2.3 of the Permit.
No economic benefit to the area	
Concerns have been raised that there will be no local economic benefit derived from the presence of the Installation.	The Environment Agency must have regard to the effects of the Installation on economic and social well-being of the local community and the desirability of promoting economic growth. It does not consider that the Installation will undermine the economic or social well-being of the local community, nor that it will be detrimental to the pursuit of economic growth so as to justify refusing the Application or imposing additional/alternative Permit conditions.
Impact on local economy	
Concerns have been raised that local businesses will suffer as a	1 and 2. The Environment Agency must have regard to the effects of the Installation on economic and social well-being of the local community and the desirability of promoting economic

EPR/AP3439DZ/A001 Issued 13/07/17 Page 72 of 82

Brief summary of issue raised	Summary of actions taken or show how this has been covered
result of the Installation, particularly those that are reliant on tourism. 2. Concerns that odour and any negative impact on air quality will impact on tourism.	growth. It does not consider that the Installation will undermine the economic or social well-being of the local community, nor that it will be detrimental to the pursuit of economic growth so as to justify refusing the Application or imposing additional/alternative Permit conditions.
Impact on tourism and leisure activities	
Concerns have been raised that the area is attractive to vast numbers of tourists, holiday makers, day trippers, cyclists, walkers, bird watchers, horse riders, car clubs, caravan sites, holiday cottages, bed and breakfast houses and hotels etc., and these would be seriously compromised by the introduction of such an enterprise.	Consideration of the impact of the Installation in relation to the tourism and leisure activities is primarily a matter for the local planning authority. However, we have had regard to it in our determination of the Application. The Permit will regulate emissions such that there will be no unacceptable levels of pollution from the Installation. We therefore do not consider that emissions from the Installation could affect tourism and leisure activities.
Impact of odour due to wind direction	
Concern has been raised regarding the odour, given the wind direction is more likely to be from an easterly or north easterly direction, and invariably fresh to strong, rather than the general prevailing wind direction in England which is from the south west, and the farm is directly east of their property and east of a local school.	Odour is considered in detail in section 4.3 of this document. Odour modelling submitted with the Application has shown the prevailing wind direction to be from the south west.
Unhappiness at Environment Agency processes / decision making	
1. Concerns have been raised about our decision making process and reminders that it is our job to protect the environment and as such, the proposal	1. 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.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 73 of 82

Brief summary of issue raised	Summary of actions taken or show how this has been covered
should be rejected.	We have carefully considered the information provided, including further information that we have sought. We have carried out the appropriate assessments and are satisfied that the Permit provides the appropriate level of protection to the environment and human health.
2. Concerns have been raised that the determination of an environmental permit may consist of one person deciding whether or not to approve a development.	2. The Application has been determined in accordance with our normal procedures and is not the decision of a single individual.
Compliance with Permit conditions	
Concern has been raised as to how the site is policed to check compliance and what will happen if the Permit is breached.	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.
Water usage	
1. Concerns have been raised over the possibility of excessive water extraction to be used in this enterprise particularly when water supply has been a problem in the past in this area at times of	1 and 2. The Applicant has confirmed in the Application that water for the development will be obtained via the mains which will supply two suitably sized, purpose built storage tanks at the front of the site. The supply has been calculated to maintain a constant supply for 24 hours following any supply failure by the supplying company. No water abstraction will be undertaken at the Installation.
drought. 2. Concerns have been raised that the water consumption for the operation, along with the	It is the obligation of the relevant water utility, on request, to supply water to homes and businesses, including the Installation. Water companies work with regulators including the Environment Agency to ensure that they can do so in a sustainable manner.
considerable increase in the additional housing planned for the area, will compromise an already fragile water supply.	Based on the information in the Application we are satisfied that proposals for raw material use (including water) are appropriate. The Permit includes condition 1.3 for the efficient use of raw materials.
Climate change and excessive rainfall	
Concerns have been raised that climate change will cause more extreme weather in the future with possible excessive rainfall overwhelming storage tanks and contaminating	We have considered the potential future effects of climate change but are satisfied that the current arrangements at the Installation are appropriate. If it ever became necessary, we have the power to vary the Permit to require additional measures to prevent pollution of the environment or harm to human health as a consequence of future weather patterns as caused by climate change.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 74 of 82

Brief summary of issue raised	Summary of actions taken or show how this has been covered
the local water supply and chalk stream.	
Extent of local opposition	
There is a high level of local opposition, and this should be taken into account in the determination of the Application.	The extent of local opposition to an installation is not a relevant consideration for our determination. We have, however, carefully considered all representations made and imposed Permit conditions to ensure that the activities at the Installation do not have an unacceptable impact on the local environment or human health.
Visual Impact	
Concern raised about the visual impact of the proposed Installation.	We have taken into account the effect which the Installation would have on the beauty of the area. However, visual impact is principally an issue for the planning authority, which has granted planning permission for the Installation. In view of this, and the fact that planning and permitting processes should be separate but complementary, we do not consider that the possibility of visual impacts alters our decision to grant the Permit.
Concerns over the granting of planning permission	
Concerns were raised over the planning process, in particular that a large number of objections were raised by people (more than 5700), 10 Parish Councils and Hunstanton Town Parish Council, which were all disregarded by the King's Lynn Borough Council Planning Committee, and permission was passed by 9 votes for, and 4 votes against. 9 councillors should not have the power to pass the application, and as there are 21 Councillors in total, other absent Councillors should have attended as they are paid out of tax payers' money to serve the public.	Concerns over the way that the planning permission was determined is a matter for the local planning authority, and consideration of this does not form part of our determination.
Lack of Environment Agency knowledge at council meeting	
Mention was made of the Environment Agency	The Environment Agency representative attended the meeting to assist by answering any general questions over the

EPR/AP3439DZ/A001 Issued 13/07/17 Page 75 of 82

Brief summary of issue raised	Summary of actions taken or show how this has been covered
representative (at the King's Lynn Council meeting on 1st and 4th	Environment Agony's role. They were not familiar with specific details within the Application.
August 2016) being questioned and their lack of knowledge of the situation, in particular with regard to waste water and	The Application has been fully assessed by a team of appropriately qualified and knowledgeable individuals. We have also sought the local public's views through our consultation.
manure removal. A query was raised whether the approval of the Application will be on his say so or whether the Environment Agency has delved much deeper into the issues.	The Application has been determined in accordance with our normal procedures and is not the decision of a single individual.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 76 of 82

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 26 May 2017 – 26 June 2017 and in the Lynn News on 26 May 2017. Additionally we made available electronic copies of the draft decision and draft permit on the webpage. Copies of the draft decision and draft permit were placed on our public register at the Environment Agency offices, Brampton Office, Bromholme Lane, Brampton, Huntingdon PE28 4NE.

We received responses from Public Health England and the Borough Council of King's Lynn & West Norfolk (from both the Environmental Quality team and Community Safety and Neighbourhood Nuisance). In addition a total of 2 responses were received from individual members of the public and one from Sedgeford Parish Council. All responses are considered below. Please note some of the issues raised in these responses were the same or very similar to 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

Public Health England (received 02/06/17)

Brief summary of issues raised

PHE note the additional information gathered by the Environment Agency, including details of the Applicant's accident management plan (AMP), a dust / bioaerosol risk assessment and additional ammonia modelling and assessment completed by the Environment Agency. Further to their initial response on 16 September 2016, PHE are reassured by the additional assessments undertaken and have no further comments to make.

Summary of actions taken or show how this has been covered

No action required.

Response received from

King's Lynn and West Norfolk Borough Council Environmental Health (Environmental Quality, Community Safety and Neighbourhood Nuisance, received 23/06/17)

Brief summary of issues raised

The Council's response includes comments from both the Environmental Quality team and Community Safety and Neighbourhood Nuisance team.

The Council state that the Noise Management Plan (NMP) submitted is comprehensive and has identified the main sources of noise arising from the poultry unit and outlines controls that they would expect to see in place for such installations. It is noted that the Council did not have sight of the noise data that has informed the NMP so this comment is made based on the review of the NMP itself.

With respect to odour, the Odour Management Plan also covers the main issues that are associated with a poultry unit and outlines the controls the Council would expect to see for such installations.

The Council's previous comment that the high velocity ventilation system including discharge fans mounted in chimneys in the ridge of the buildings indicates that there will be good dispersion of discharges is still valid. As the site is some distance from the nearest residential receptors it is concluded that the site is not likely to cause an exceedance of air quality standards.

However, it is noted that the Applicant has submitted an amendment to the planning permission granted by the local authority. This includes a biomass boiler as a method of

EPR/AP3439DZ/A001 Issued 13/07/17 Page 77 of 82

heating the poultry houses. Permission has not been granted but should the Operator apply to vary the Permit, the Council would expect to see this included as part of the noise assessment and within the NMP as well as emissions data being provided to assess any impact on air quality.

Summary of actions taken or show how this has been covered

The Environment Agency is aware that an application to amend the planning permission has been submitted to the local authority. The Operator will have to comply with all authorisations for the Installation, including the Permit and any (varied) planning permission. Should there be a conflict between these authorisations, the Operator may not be able to operate the Installation until this is resolved, for example through an application to vary the Permit. Any such application would be assessed in accordance with the guidance and policies current at the time.

No action required.

Response received from

Sedgeford Parish Council (received 23/06/17)

Brief summary of issues raised

Sedgeford Parish Council made the following points about the Application:

- 1. In a context where planning permission has already been granted for these 4 units, the Council wishes to see stringent conditions specified, implemented and monitored to reduce to a minimum any negative environmental impact.
- 2. While the conditions specified in this document might appear thorough, with only two people working at the site, they could prove difficult to meet. The Council therefore seeks assurances that the conditions set will be monitored adequately, with regular checks by the Environment Agency.
- 3. The Council has concerns about whether the measures outlined by the Applicant will be sufficient to prevent possible contamination of ground water, affecting boreholes which supply drinking water to neighbouring villages and pollution of the nearby Heacham River.
- 4. In relation to odour, the Council notes: "Once the operation of the Installation commences, there is a requirement to review and record (as soon as practicable after a complaint) whether changes to the OMP should be made and make any appropriate changes to the OMP identified by the review." The Council asks what the procedure will be for making such a complaint and where information about this will be available to local residents.
- 5. Regarding noise, the Council notes the comment: "The Applicant has applied for a permit to install 4 poultry units, each with 15 roof vents and 3 silo fans, gable end fans (although only used in period of very warm weather) and LPG fuelled boilers for heating the poultry houses. However, the assessment submitted to support the Application was for 8 poultry units and a biomass boiler for heating the poultry houses. We undertook sensitivity checks on the Applicant's assessment of the typical operation, based on the plant actually applied for, which indicate the specific level is below day-time and night-time background and can be considered low risk." This implies that, had the Application been for 8 units, a level that would not have been considered 'low risk'. The Council trusts that this point would be taken fully into account should there be an application at a future date to add extra units on this site.

Summary of actions taken or show how this has been covered

 The Permit contains conditions to prevent or minimise environmental impact. We are satisfied that the Applicant is technically competent and will have appropriate management systems in place to operate the installation in compliance with the conditions of the Permit.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 78 of 82

- 2. To ensure compliance the Installation will be inspected by the Environment Agency in accordance with normal inspection routines. Any non-compliance will be dealt with in accordance with our published Enforcement and Sanctioning Guidance. In addition the Applicant has confirmed the level of staffing and measures in place in the case of emergencies in its response to a Schedule 5 Notice received on 22 December 2016. There will be two staff on site between 7.30am 4pm, and a rota for staff on call outside of these hours, with additional contracted staff on site during bird catching and clean out operations. Section 4.7 of this document provides more detail regarding emergency procedures for different accident scenarios, and additional measures in place when the site is unmanned. We are satisfied that the procedures in place are suitable to prevent or minimise environmental pollution in the event of an accident.
- 3. Site drainage is addressed in section 4.6 of this document. We have assessed the risk of pollution from the Installation and are satisfied that the measures required by the Permit to be in place will ensure there is no pollution of local boreholes or the Heacham River.
- 4. The Environment Agency is able to receive complaints through its incident hotline (telephone number 0800 80 70 60) or by letter. Our recommended method is via the incident hotline for efficiency (we advise that complainants <u>should not</u> use e-mail to report an incident, as this could delay our response). The Environment Agency will respond to complaints wherever possible and appropriate (for example if complaints are not isolated and/or anonymous). The Environment Agency may also undertake proactive monitoring to substantiate the nature, origin and extent of any complaints. The Environment Agency monitors the Operator's complaints records as part of compliance and routine incident response commitments.

In addition, as stated in the Applicant's Complaints Procedure within the OMP, any odour complaints received by the Installation shall be recorded on an odour complaints form. Odour complaints shall be fully investigated and available at future Environment Agency inspections. Complaints received directly from the public will be notified to the Environment Agency. Following all investigations into complaints, if the issue is caused by an operation at the site a discussion will be had with the Environment Agency and any practical proactive measures which can be agreed will be implemented to help minimise the impact.

If local residents want to find out if any complaints have been made, and the nature of the complaints, they can request this information from the Environment Agency by ringing 03708 506 506 or by email to enquiries@environment-agency.gov.uk.

5. The sensitivity checks were undertaken to assess the noise from the current proposal for 4 houses. This does not imply that for 8 units the level would or would not have been considered 'low risk', as these checks were not required for our assessment. Should the Operator wish to expand in future, they would need to submit a variation application to the Environment Agency for consideration. A full assessment of any proposed changes would take place at this time.

Response received from

Public Response (received 29/05/17)

Brief summary of issues raised

The respondent stated the following:

"The new draft proposal is a travesty. The original proposal was for the transporting of live chicks to the site, which would then be fattened up and then replaced by new chicks when required.

It would now appear there are going to be sheds for dead birds and some form of cooking facilities, which would entail far more traffic on these very narrow country lanes and the odour

EPR/AP3439DZ/A001 Issued 13/07/17 Page 79 of 82

would drift over the immediate countryside.

This is an agricultural area, not a suitable environment for a chicken factory."

Summary of actions taken or show how this has been covered

This comment appears to be in relation to a proposed amendment to planning permission. The Applicant has confirmed that any fallen stock will be collected and recorded daily, with carcasses stored in purpose built, locked bins. The Application does not include cooking facilities or a shed for dead birds.

We have taken into consideration the potential environmental impact of the activity on all sensitive receptors, including residential, commercial and nature conservation sites. Location and land use is a matter for consideration during the planning process and does not form part of the Permit decision.

No action required.

Response received from

Public Response (received 11/06/17)

Brief summary of issues raised

The respondent states that the following objections were raised during previous consultation, but that they warrant further consideration at this stage:

1. General Operational Management of the proposed Facility

Concerns were raised regarding: who the Permit will be granted to and who will manage the operation (allegedly Banham Poultry), staffing levels, disparities between the Application and what was originally proposed (e.g. for there to be 8 sheds and employee accommodation) so whether what is now proposed will ensure appropriate remedial actions will be in place if there are accidents or incidents during out of hours unmanned times.

2. Control of odour, noise, litter, pests

Concerns were raised over: control of odour when doors of sheds open and birds are removed, during the cleaning process and when spent litter is removed to be spread on surrounding land. It was stated that the local economy is reliant on tourism, and any negative impact on air quality will have a negative impact.

3. Control of handling and storage of residual wastes from the process

Concerns were raised over potential contamination of groundwater in a Source Protection Zone 2. Concerns were also raised over potential for contamination from both the operations on site and from the spreading of spent litter and waste water on surrounding fields. Further concerns were raised over the amount of water consumption required for site operations and the impact on the water supply. It was noted that the Environment Agency have imposed conditions with regard to present/potential contaminant linkage to controlled waters. It was also noted that the Applicant omitted to reply to items 8j and 8k as they are not operators of the site, but manure and slurry and/or waste water will be spread on land owned by Newcome Baker Farms.

4. Potential impacts on the environment

Concerns were raised over information on the impacts on Pink Footed Geese being inadequate in the submission for planning permission, and to birds more generally since the site is close to two RSPB sites giving rise to a possible risk of cross contamination with wild birds, which may spread that contamination further afield during migration from the Wash. Concerns were also raised over pollution at Heacham River.

5. Potential Impacts on Health

Concerns were noted from medical professionals regarding increasing use of antibiotics. Concerns were also raised regarding exposure to airborne pathogens such as MRSA, Salmonella, E. coli and Campylobacter.

6. Any local factors not considered

Concerns were raised over the Installation's potential impact on tourism and leisure activities,

EPR/AP3439DZ/A001 Issued 13/07/17 Page 80 of 82

for health and local economic reasons.

Footnote

The respondent mentioned that 10 Parish Councils and 1 Town Council raised concerns over the planning application but that these were said to have been disregarded by the KLBC Planning Committee. They also mention that the Applicant has since made further amendments since planning approval. Concerns were raised that all of these factors should have been included in the original application prior to planning approval being granted, consequently that the Applicant was seeking to unfairly exploit the planning process and the Application.

Summary of actions taken or show how this has been covered

We have carefully considered the comments and objections raised. We consider that we have fully addressed the relevant matters when reaching our draft decision and therefore do not consider that the points raised require any changes to our proposed decision. We cross refer below to sections of this document where the matters raised by the respondent have been addressed, and/or reproduce the relevant response(s).

- 1. The Operator is Newcome-Baker Farms Limited. Clarification of who will manage the operation is given in Annex 1, section 2 c, under 'control of operations at the site'. The Operator is required to comply with the Permit conditions. Staffing levels have already been considered and addressed in Annex 1, section 2 c, under 'staffing of site' and section 4.7 above and we are satisfied that measures in place are suitable during out of hours unmanned times.
- 2. Odour is considered in detail in section 4.3 and in Annex 1, section 2 c, under 'odour' above. The Environment Agency is satisfied that emissions of odour from the Installation will not pose an unacceptable risk of pollution to the environment or harm to human health. This is following a review of the information provided by the Applicant, and the conditions present within the Permit, which has taken in to account opening of doors, removal of birds and litter and cleaning out operations.
- 3. Site drainage has been assessed by the Environment Agency and, following thorough assessment, we are satisfied that the Installation will not pose an unacceptable risk of pollution to ground waters or surface waters. This is as described in section 4.6 of this document.

Land spreading outside of the Installation boundary is outside the remit of the Permit and is therefore not part of our assessment.

Water usage is addressed in Annex 1, section 2 c above under 'water usage'.

With reference to the conditions recommended to the planning authority by the Environment Agency and included in the planning permission granted in August 2016, we have responded to an application to the local planning authority to discharge these conditions. We have recommended that the relevant conditions (land contamination and surface water drainage scheme) be discharged.

The comment that the Applicant has omitted to reply to items 8j and 8k is addressed in Annex 1, section 2 c under 'waste water/chicken waste pollution'.

- 4. For concerns relating to Pink Footed Geese see Annex 1, section 2 c under 'impact on local wildlife'. Concerns over pollution at Heacham River are addressed in response to consultee comments covered in Annex 1 section 2, with reference to the Environment Agency's assessment of site drainage in section 4.6 of this document.
- 5. Concerns regarding increasing use of antibiotics and exposure to airborne pathogens such as MRSA, Salmonella, E. coli and Campylobacter are addressed in Annex 1, section 2 c under 'use of antibiotics' and 'effect on human health from salmonella, campylobacter, MRSA

EPR/AP3439DZ/A001 Issued 13/07/17 Page 81 of 82

and E. coli'.

6. Concerns over the potential impact on tourism and leisure activities, for health and local economic reasons, are addressed in Annex 1, section 2 c under 'impact on local economy' and 'impact on tourism and leisure activities'.

Footnote. Concerns over the planning decision are addressed in Annex 1 section 2 c above under 'concerns over the granting of planning permission'.

Regarding the application for amendment of the planning permission, this was submitted after the Application, and we cannot comment on its timing. The Operator will have to comply with all authorisations for the Installation, including the Permit and any (varied) planning permission. Should there be a conflict between these authorisations, the Operator may not be able to operate the Installation until this is resolved, for example through an application to vary the Permit. Any such application would be assessed in accordance with the guidance and policies current at the time.

In summary, having considered all the matters raised in the consultation response the Environment Agency is satisfied that in determining the Application, we have followed our current guidance and policies and the decision to grant the Permit has taken full account of the Applicant's submitted proposal and its associated risks to the environment and human health. We therefore consider that no further action is required in relation to this consultation response.

EPR/AP3439DZ/A001 Issued 13/07/17 Page 82 of 82