Determination of an Application for an Environmental Permit under the Environmental Permitting (England & Wales) Regulations 2010

Consultation on our draft decision document recording our decision-making process

The Permit Number is: EPR/LP3433WG

The Applicant is: Mr Philip Whittal and Mrs Jennifer Whittal,

trading as PSJ Whittal.

The Installation is located at: Bowling Green Farm Poultry Unit

Bowling Green Farm

Clehonger Hereford HR2 9SJ

Consultation commences on: 07/11/2016

Consultation ends on: 02/12/2016

What this document is about

This is a draft decision document, which accompanies a draft Permit.

It explains how we have considered the Applicant's Application, and why we have included the specific conditions in the draft Permit we are proposing to issue to the Applicant. It is our record of the 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.

The document is in draft at this stage, because we have yet to make a final decision. Before we make this decision, we want to explain our thinking to the public and other interested parties, to give them a chance to understand that thinking and, if they wish, to make relevant representations to us. We will make our final decision only after carefully taking into account any relevant matter raised in the responses we receive. Our mind remains open at this stage: although we believe we have covered all the relevant issues and reached a reasonable conclusion, our ultimate decision could yet be affected by any information that is relevant to the issues we have to consider. However, unless we receive information that leads us to alter the conditions in the draft Permit, or to reject the Application altogether, we will issue the Permit in its current form.

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In this document we frequently say "we have decided". That gives the impression that our mind is already made up; but as we have explained above, we have not yet done so. The language we use enables this document to become the final decision document in due course with no more re-drafting than is absolutely necessary.

We try to explain our decision as accurately, comprehensively and plainly as possible. Achieving all three objectives is not always easy, and we would welcome any feedback as to how we might improve our decision documents in future. A lot of technical terms and acronyms are inevitable in a document of this nature: we provide a glossary of acronyms near the front of the document, for ease of reference.

Preliminary information and use of terms

We gave the application the reference number EPR/LP3433WG/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/LP3433WG. We refer to the proposed permit as "the **Permit**" in this document.

The Application was duly made on 07 March 2016.

The Applicant is Mr Philip Whittal and Mrs Jennifer Whittal, trading as PSJ Whittal. We refer to Mr Philip Whittal and Mrs Jennifer Whittal 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 Mr Philip Whittal and Mrs Jennifer Whittal "the **Operator**".

The Applicant's proposed facility is located at Bowling Green Farm Poultry Unit, Bowling Green Farm, Clehonger, Hereford, HR2 9SJ. We refer to this as "the **Installation**" in this document.

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Glossary of acronyms used in this document

| AIC Agricultural Industries Confederation AONB Area of Outstanding Natural Beauty APIS Air Pollution Information System AOMAU Air Quality Modelling and Assessment Unit BAT Best Available Technique(s) Bref BAT Reference Note CLe Critical Level CLo Critical Level CLo Critical Load CROW Countryside and Rights of Way Act 2000 DAA Directly associated activity – Additional activities which have a technical connection with the activity, of an Installation, are carried out on the same site and could have an effect on pollution DD Decision Document EAL Environmental Assessment Level EIAD Environmental Impact Assessment Directive (85/337/EEC) ELV Emission Limit Value EMS Environmental Management System EPR Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No. 675) as amended EQS Environmental Quality Standard EU-EQS European Union Environmental Quality Standard IED Industrial Emissions Directive (2010/75/EU) LADPH Local Authority Director(s) of Public Health LPG Liquid Petroleum Gas NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England PPS Public Participation Statement | ABPR | Regulation (EC) 1069/2009 and Regulation (EC) 142/2011 as implemented by the Animal By-product (Enforcement) (England) Regulations 2011 |
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| APIS Air Pollution Information System AQMAU Air Quality Modelling and Assessment Unit BAT Best Available Technique(s) Bref BAT Reference Note CLe Critical Level CLo Critical Load CROW Countryside and Rights of Way Act 2000 DAA Directly associated activity — Additional activities which have a technical connection with the activity, of an Installation, are carried out on the same site and could have an effect on pollution DD Decision Document EAL Environmental Assessment Level EIAD Environmental Impact Assessment Directive (85/337/EEC) ELV Emission Limit Value EMS Environmental Management System EPR Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No. 675) as amended EQS Environmental Quality Standard EU-EQS European Union Environmental Quality Standard IED Industrial Emissions Directive (2010/75/EU) LADPH Local Authority Director(s) of Public Health LPG Liquid Petroleum Gas NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PHE Public Health England | AIC | |
| AGMAU Air Quality Modelling and Assessment Unit BAT Best Available Technique(s) Bref BAT Reference Note CLe Critical Level CLo Critical Load CROW Countryside and Rights of Way Act 2000 DAA Directly associated activity – Additional activities which have a technical connection with the activity, of an Installation, are carried out on the same site and could have an effect on pollution DD Decision Document EAL Environmental Assessment Level EIAD Environmental Impact Assessment Directive (85/337/EEC) ELV Emission Limit Value EMS Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No. 675) as amended EQS Environmental Quality Standard EU-EQS European Union Environmental Quality Standard IED Industrial Emissions Directive (2010/75/EU) LADPH Local Authority Director(s) of Public Health LPG Liquid Petroleum Gas NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | AONB | Area of Outstanding Natural Beauty |
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| Bref BAT Reference Note CLe Critical Level CLo Critical Load CROW Countryside and Rights of Way Act 2000 DAA Directly associated activity – Additional activities which have a technical connection with the activity, of an Installation, are carried out on the same site and could have an effect on pollution DD Decision Document EAL Environmental Assessment Level EIAD Environmental Impact Assessment Directive (85/337/EEC) ELV Emission Limit Value EMS Environmental Management System EPR Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No. 675) as amended EQS Environmental Quality Standard EU-EQS European Union Environmental Quality Standard IED Industrial Emissions Directive (2010/75/EU) LADPH Local Authority Director(s) of Public Health LPG Liquid Petroleum Gas NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | AQMAU | Air Quality Modelling and Assessment Unit |
| CLe Critical Level CLo Critical Load CROW Countryside and Rights of Way Act 2000 DAA Directly associated activity – Additional activities which have a technical connection with the activity, of an Installation, are carried out on the same site and could have an effect on pollution DD Decision Document EAL Environmental Assessment Level EIAD Environmental Impact Assessment Directive (85/337/EEC) ELV Emission Limit Value EMS Environmental Management System EPR Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No. 675) as amended EU-EQS Environmental Quality Standard EU-EQS European Union Environmental Quality Standard IED Industrial Emissions Directive (2010/75/EU) LADPH Local Authority Director(s) of Public Health LPG Liquid Petroleum Gas NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | BAT | Best Available Technique(s) |
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| DAA Directly associated activity – Additional activities which have a technical connection with the activity, of an Installation, are carried out on the same site and could have an effect on pollution DD Decision Document EAL Environmental Assessment Level EIAD Environmental Impact Assessment Directive (85/337/EEC) ELV Emission Limit Value EMS Environmental Management System EPR Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No. 675) as amended EQS Environmental Quality Standard EU-EQS European Union Environmental Quality Standard IED Industrial Emissions Directive (2010/75/EU) LADPH Local Authority Director(s) of Public Health LPG Liquid Petroleum Gas NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | CLo | Critical Load |
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| EAL Environmental Assessment Level EIAD Environmental Impact Assessment Directive (85/337/EEC) ELV Emission Limit Value EMS Environmental Management System EPR Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No. 675) as amended EQS Environmental Quality Standard EU-EQS European Union Environmental Quality Standard IED Industrial Emissions Directive (2010/75/EU) LADPH Local Authority Director(s) of Public Health LPG Liquid Petroleum Gas NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | DAA | with the activity, of an Installation, are carried out on the same site and could have an |
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| ELV Emission Limit Value EMS Environmental Management System EPR Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No. 675) as amended EQS Environmental Quality Standard EU-EQS European Union Environmental Quality Standard IED Industrial Emissions Directive (2010/75/EU) LADPH Local Authority Director(s) of Public Health LPG Liquid Petroleum Gas NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | EAL | Environmental Assessment Level |
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| EPR Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No. 675) as amended EQS Environmental Quality Standard EU-EQS European Union Environmental Quality Standard IED Industrial Emissions Directive (2010/75/EU) LADPH Local Authority Director(s) of Public Health LPG Liquid Petroleum Gas NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | ELV | Emission Limit Value |
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| EU-EQS European Union Environmental Quality Standard IED Industrial Emissions Directive (2010/75/EU) LADPH Local Authority Director(s) of Public Health LPG Liquid Petroleum Gas NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | EPR | |
| IED Industrial Emissions Directive (2010/75/EU) LADPH Local Authority Director(s) of Public Health LPG Liquid Petroleum Gas NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | EQS | Environmental Quality Standard |
| LADPH Local Authority Director(s) of Public Health LPG Liquid Petroleum Gas NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | EU-EQS | European Union Environmental Quality Standard |
| LPG Liquid Petroleum Gas NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | IED | Industrial Emissions Directive (2010/75/EU) |
| NMP Noise Management Plan NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | LADPH | Local Authority Director(s) of Public Health |
| NVZ Nitrate Vulnerable Zone OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | LPG | Liquid Petroleum Gas |
| OMP Odour Management Plan Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | NMP | Noise Management Plan |
| Opra Operator Performance Risk Appraisal PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | NVZ | Nitrate Vulnerable Zone |
| PC Process Contribution PEC Predicted Environmental Concentration PHE Public Health England | OMP | Odour Management Plan |
| PEC Predicted Environmental Concentration PHE Public Health England | Opra | Operator Performance Risk Appraisal |
| PHE Public Health England | PC | Process Contribution |
| | PEC | Predicted Environmental Concentration |
| PPS Public Participation Statement | PHE | Public Health England |
| | PPS | Public Participation Statement |

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| PR | Public Register |
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| SAC | Special Area of Conservation |
| SCR | Site Condition Report |
| SHPI(s) | Site(s) of High Public Interest |
| SPA(s) | Special Protection Area(s) |
| SSAFO | Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010 |
| SSSI(s) | Site(s) of Special Scientific Interest |
| TGN | Technical Guidance Note |
| WFD | Waste Framework Directive (2008/98/EC) |



1 Our proposed decision

We are minded to grant the Permit to the Applicant. This will allow them 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.

This Application is to operate an installation which is subject principally to the Industrial Emissions Directive (IED).

The draft 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 Environmental Permitting (England and Wales) Regulations 2010 (EPR) 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. This document does, however, provide an explanation of our use of "tailor-made" or Installation-specific conditions, or where our Permit template provides two or more options.

2 How we reached our draft decision

2.1 Receipt of Application

The Application was duly made on 07 March 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 (see below).

The Applicant made no claim for commercial confidentiality. We have not received any information in relation to the Application that appears to be confidential in relation to any party.

2.2 Consultation on the Application

We carried out consultation on the Application in accordance with the EPR and our statutory PPS. 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, which 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

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secure the involvement of representatives of interested persons in the exercise of our functions, by providing them with information, consulting them or involving them in any other way. In this case, our consultation already satisfies the Act's requirements.

We advertised the Application by a notice placed on our website, 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 Hereford Times on 30 June 2016.

We made a copy of the Application and all other documents relevant to our determination (see below) available to view on our Public Register at Riversmeet House, Northway Lane, Newtown Industrial Estate, Tewkesbury, GL20 8FD. Anyone wishing to see these documents could do so and arrange for copies to be made.

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

- Herefordshire Council (Environmental Health Department)
- Public Health England (PHE)
- Director of Public Health (Herefordshire Council) (LADPH)
- Health & Safety Executive

These are bodies whose expertise, democratic accountability and/or local knowledge make it appropriate for us to seek their views directly. Note under our Working Together Agreement with Natural England, we only inform Natural England of the results of our assessment of the impact of the Installation on designated Habitats sites.

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

2.3 Requests for Further Information

Although we were able to consider the Application duly made, we did in fact need more information in order to determine it.

We received additional information during the determination from the Applicant as follows:

- Clarification of what happens to wash waters received 12 May 2016
- Clarification of poultry house washing out procedure received 18 July 2016
- Confirmation that pesticides and veterinary medicines are not stored on site and the water source – received 09 September 2016
- Confirmation of wash water tank specification received 20 September 2016

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 New site plan including geographic features – received 17 October 2016

We made a copy of this information available to the public in the same way as the responses to our information notices.

Having carefully considered the Application and all other relevant information, we are now putting our draft decision before the public and other interested parties in the form of a draft Permit, together with this explanatory document. As a result of this stage in the process, the public has been provided with all the information that is relevant to our determination, including the original Application and additional information obtained subsequently, and we have given the public two separate opportunities (including this one) to comment on the Application and its determination. Once again, we will consider all relevant representations we receive in response to this final consultation and will amend this explanatory document as appropriate to explain how we have done this, when we publish our final decision.

3 The legal framework

The Permit will be granted, under Regulation 13 of the EPR. The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope including those under IED. In particular, the Installation is:

- an intensive farming installation as described by the IED; and
- subject to aspects of other relevant legislation which also have to be addressed.

We address some of the major legal requirements directly where relevant in the body of this document. Other requirements are covered in a section towards the end of this document.

We consider that, if we grant the Permit, it will ensure that the operation of the Installation complies with all relevant legal requirements and that a high level of protection will be delivered for the environment and human health.

We explain how we have addressed specific statutory requirements more fully in the rest of this document.

4 The Installation

4.1 Description of the Installation and related issues

4.1.1 The permitted activities

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The Installation is subject to the EPR because it carries out an activity listed in Part 2 of Schedule 1 to the EPR being:

• Section 6.9 A(1) (a) (i) – Rearing of poultry intensively in an installation with more than 40,000 places.

An Installation may also comprise "directly associated activities", however there are none at this Installation. The listed activity referred to above therefore comprises the Installation – a regulated facility.

4.1.2 The Site

Bowling Green Farm Poultry Unit is situated approximately 1.5 kilometres east of the village of Clehonger, Hereford. The Installation is approximately centred on National Grid Reference SO 46344 37116. The surrounding land is primarily used for agricultural purposes.

There is one Special Area of Conservation (SAC) site located within 10 kilometres of the Installation. There are three Sites of Special Scientific Interest (SSSIs) located within 5 km of the Installation. There are also ten Local Wildlife Sites (LWS)/Ancient Woodlands (AW) sites within 2 km of the Installation.

The Applicant submitted a plan which we consider is satisfactory, showing the site of the Installation and its extent. A plan is included in Schedule 7 to the draft Permit, and the Operator is required to carry on the permitted activities within the site boundary.

Further information on the site is addressed below at 4.2.

4.1.3 What the Installation does

The key features of the Installation can be summarised as follows:

The Installation consists of 4 modern broiler houses with a capacity for 212,000 birds. Birds are housed at day old and de-populated at around thirty-two to forty days of age with approximately seven days empty, which gives 7 cycles per annum, this is done on an all-out all-in basis.

Before bird arrival, the houses are pre-warmed. Temperature and humidity are computer controlled and closely monitored on a daily basis. Ventilation is controlled by a negative pressure system using high velocity roof mounted extraction fans with side wall air inlets.

At depletion, the litter is removed from the site and spread on Operator controlled land with some surplus being sold. The farm is pressure washed, disinfected and dried out prior to the cycle beginning again.

4.1.4 Key Issues in the Determination

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The key issues arising during this determination were emissions to air (and their impact), odour and noise. We therefore describe how we determined these issues in most detail in this document.

4.2 The site and its protection

4.2.1 Site setting, layout and history

The site is located in a rural area. The nearest human receptors are approximately 550 metres to the east of the site. There are also other residences in the villages of Allensmore and Clehonger. The surrounding area comprises mainly agricultural land. General drainage is in a westerly direction. The nearest watercourse is Cage Brook which is 1550m to the north. The site has been previously used for agricultural purposes and grazing.

4.2.2 <u>Proposed site design: potentially polluting substances and prevention</u> measures

The Applicant reports that the operations at Bowling Green Farm will be in accordance with Sector Guidance Note EPR6.09 'How to comply with your environmental permit for intensive farming'.

A summary of the technical standards with regard to pollution prevention are listed below.

- All activities are carried out on an impermeable surface with a sealed drainage system.
- All fuel oil storage tanks are bunded. The bund meets the requirements of SSAFO.
- Pesticides and veterinary medicines are stored off site.
- Feed is stored in silos sited away from site traffic and protected by guard rails. No liquid feed is stored at the site.
- House wash water is collected in storage tanks awaiting removal from site.
 The tanks conform to BS 5502-50:1993+A2:2010.
- No litter is stored on the site.

Soil and Groundwater

We are required by EPR and IED to ensure that that installation permits contain appropriate requirements relating to protection of soil and groundwater. They also provide that appropriate requirements are included concerning the periodic monitoring of soil and groundwater in relation to relevant hazardous substances likely to be found on site and having regard to the possibility of contamination at the site. It is for Member States to determine what requirements are appropriate in individual case and, having regard to hazardous substances likely to be present and the possibility of contamination, the Environment Agency's H5 Guidance states that it is only necessary for an operator to take samples of soil or groundwater and

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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 an 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
- 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
- hazards to land and groundwater but there is evidence that there is no historic contamination by those substances that pose the hazard.

The site condition report (SCR) for Bowling Green Farm Poultry Unit (dated 29/02/16) demonstrates that there are no hazards or likely pathway to land or groundwater and no historic contamination on site that may present a hazard from the same contaminants. Therefore, on the basis of the risk assessment presented in the SCR, we accept that they have not provided baseline reference data for the soil and groundwater at the site at this stage.

4.2.3 Closure and decommissioning

We are required by EPR and IED to ensure that, upon definitive cessation of activities at an installation, operators take necessary action so that the site ceases to pose any significant risk to human health or the environment (taking into account its current or approved future use) due to soil and groundwater contamination resulting from the permitted activities. Having considered the information submitted in the Application, in particular information concerning risks to soil and groundwater and the Applicant's Site Closure Plan, we are satisfied that the necessary actions will be in place for the closure and decommissioning of the Installation.

At the definitive cessation of activities, the Operator has to satisfy us that it has met the requirements of EPR and IED set out above. To do this, the Operator will apply to us for surrender of the Permit, which we will not grant unless and until we are satisfied that these requirements have been met.

4.3 Operation of the Installation – general issues

4.3.1 Administrative issues

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EPR provides that we may not grant the Applicant a permit if we consider that they will not have control over the operation of the Installation or will not operate the Installation so as to comply with the conditions included in the Permit. Having considered all the information available to us, we are satisfied that this will not be the case and that, subject to meeting all other requirements, we may grant the Applicant the Permit.

4.3.2 Management

The draft Permit requires that the Applicant has in place, and follows, a written management system. The Applicant has stated in the Application that they will implement a management system which meets the conditions set out in Sector Guidance Note EPR6.09 'How to comply with your permit for intensive farming'.

We are satisfied that appropriate management systems and management structures will be in place for this Installation, and that sufficient resources are available to the Operator to ensure compliance with all the Permit conditions.

4.3.3 Site security

Having considered the information submitted in the Application, we are satisfied that appropriate infrastructure and procedures will be in place to ensure that the site remains secure.

4.3.4 Accident management

We are required by EPR and IED to ensure that necessary measures are in place to deal with incidents and accidents at installations. The Applicant has submitted an Accident Management Plan. Having considered that Plan and other information submitted in the Application, we are satisfied that necessary measures will be in place, in particular to ensure that accidents that may cause pollution are prevented but that, if they should occur, their consequences are minimised.

4.3.5 Raw Materials

To assist in determining the possible environmental risks posed by the installation, so what controls are required in the Permit, we need to know what substances are to be used on site and in what quantities. The Applicant has submitted a Raw Materials Inventory as part of the application. The Inventory includes biocides, pesticides, veterinary medicines, bedding types and fuels & oils. The Inventory lists the quantity used per annum and the quantity stored on site. There are no biocides, pesticides or veterinary medicines stored on the site. Raw materials are selected to meet the requirements of the end market, with competitive drivers determining in some cases the specific materials consumed. All the raw materials used in the process are approved for use under the Defra approved list of cleaning chemicals and Red Tractor Farm Assurance Poultry Scheme. Other raw materials consumed are frequently reviewed, with the aims of these reviews being to improve process

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performance and to minimise potential environmental impact. We are therefore satisfied that the controls in the draft Permit are adequate to account for the substances and quantities to be used on site.

4.3.6 Operating techniques

We have specified that the Applicant must operate the Installation in accordance with the following documents contained in the Application:

Table 1 – Operating Techniques

| Description | Parts | Date Received |
|---|---|---------------|
| Application EPR/LP3433WG/A001 | Responses to Part B3.5 of the application form and referenced supporting documentation. | 07/03/2016 |
| Additional information requested 10/05/2016 | Response to Request for Information confirming method of disposal of dirty wash water. | 11/05/2016 |
| Additional information requested 15/07/2016 | Response to Request for Information confirming house washing procedure. | 16/07/2016 |
| Additional information requested 08/09/2016 | Confirmation of no storage of chemicals or medicines on site and the water source. | 08/09/2016 |
| Additional information requested 20/09/2016 | Confirmation of wash water tanks specification. | 20/09/2016 |
| Additional information requested 20/09/2016 | New site plan showing geographical features. | 17/10/2016 |

The details set out above describe the techniques that will be used for the operation of the Installation that have been assessed by the Environment Agency as BAT; they form part of the Permit through Permit condition 2.3.1 and Table S1.2 in the Permit Schedules.

4.3.7 Energy efficiency

We are required by EPR and IED to ensure that installations are operated in accordance with the principle of using energy efficiently. We have considered

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the use of energy within, and generated by, the Installation which are normal aspects of all EPR permit determinations.

The Applicant has submitted energy efficiency proposals which include:

- Regular reading of electricity meter
- Regular reading of mains gas meter/ tank stock readings
- Ventilation matched to the physiological/welfare needs of the birds
- Regular maintenance of heating system to ensure efficiency
- Drinking system regularly maintained and properly adjusted to bird height to prevent leaks
- Integrity of buildings maintained to prevent ingress of water and draughts, insulation levels above 150 mm fibre glass
- Use of low energy light bulbs and installation of windows in side walls to allow ingress of natural light
- Regular servicing of all electrical equipment by qualified personnel
- Use of LPG boilers to provide a hot water heating system

Having considered the information submitted in the Application, we are satisfied that appropriate measures will be in place to ensure that energy is used efficiently within the Installation.

4.3.7 Minimising Waste

We are required by EPR and IED to ensure that installations are operated in accordance with the principle of preventing waste generation and, where this is not possible, observing the waste hierarchy referred to in Article 4 WFD. The Applicant has submitted a statement that outlines their waste avoidance procedures. See the summary below.

- Paper waste will be commonly generated from chick box liners upon delivery of day old chicks.
- Plastic waste will normally be in two forms, wrapping from bales of wood shavings and bottles from used disinfectants and detergents. The latter form of plastic waste is returned to the supplier for disposal after use, as are used light bulbs. By good management of the litter quality, fewer bales of wood shavings will be needed, thus lowering the amount of plastic wrapping discarded. Large, empty, plastic bottles from detergents shall be 'recycled' and used for foot dip containers or smaller rubbish bins for the storerooms.
- Poultry carcasses are, under normal circumstances, collected and stored in sealed containers awaiting regular collection under the fallen stock scheme by a licensed collection agent. In the event of an outbreak of high mortality, carcasses will be placed in sealed containers and removed, as detailed in the emergency plan.

Having considered the information submitted in the Application, we are satisfied that the waste hierarchy will be applied to the generation of waste

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and that any waste generated will be treated in accordance with this hierarchy.

We are satisfied that waste from the Installation that cannot be recovered will be disposed of using a method that minimises any impact on the environment. Standard condition 1.4.1 will ensure that this position is maintained.

5. Minimising the Installation's environmental impact

Regulated activities can present different types of risk to the environment. These include: odour, noise and vibration; accidents; fugitive emissions to air and water; point source releases to air, discharges to ground or groundwater; global warming potential and generation of waste and other environmental impacts. All these factors are discussed in this and other sections of this document. For an installation of this kind, the principal emissions are those to air, although we also consider those to land and water.

The next sections of this document explain how we have approached the critical issue of assessing the likely impact of the emissions to air from the Installation on human health and the environment and what measures we are requiring to ensure a high level of protection.

5.1 Environmental Risk Assessment

A methodology for risk assessment of point source emissions to air, which we use to assess the risk of applications we receive for permits, is set out in our Guidance on Risk Assessment and has the following steps:

- Describe emissions and receptors
- Calculate process contributions
- Screen out insignificant emissions that do not warrant further investigation
- Decide if detailed air modelling is needed
- Assess emissions against relevant standards
- Summarise the effects of emissions

The risk assessment uses a concept of "process contribution (PC)", which is the estimated concentration of emitted substances after dispersion into the receiving environmental media at the point where the magnitude of the concentration is greatest. The guidance provides a simple method of calculating PC primarily for screening purposes and for estimating process contributions where environmental consequences are relatively low. It is based on using dispersion factors. These factors assume worst case dispersion conditions with no allowance made for thermal or momentum plume rise and so the process contributions calculated are likely to be an overestimate of the actual maximum concentrations. More accurate calculation of process contributions can be achieved by mathematical dispersion models, which take into account relevant parameters of the release

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and surrounding conditions, including local meteorology. These techniques are expensive but normally lead to a lower prediction of PC.

The Applicant submitted a risk assessment in accordance with our Guidance on Risk Assessment covering odour, dust, noise and accidents. We have reviewed the assessment of the environmental risk from the Installation and consider that it is satisfactory. The assessment shows that, applying the conservative criteria in our Guidance on Risk Assessment, all emissions may be categorised as environmentally insignificant.

5.2 Assessment of impact on air quality - odour emissions

The Applicant has submitted an Odour Risk Assessment which states all odour risk management measures are in accordance with Sector Guidance Note EPR6.09 'How to comply with your environmental permit for intensive farming'. Mitigation measures are incorporated into the Environmental Management System.

As there are no sensitive receptors within 400m of the Installation, there is no requirement for an Odour Management Plan. Condition 3.3.2 of the draft Permit requires an Odour Management Plan to be implemented should any odour issues arise at the site. We are satisfied that the proposed measures are appropriate.

5.3 Impact on Habitats sites, SSSIs and other conservation sites

As set out in section 4.1.2 above, the Installation is within relevant screening distances of a number of designated habitat sites: one SAC located within 10 kilometres of the Installation; three SSSIs located within 5 km of the Installation; and ten LWS/ AWs within 2 km of the Installation.

These sites receive differing levels of legal protection depending on their designation.

The SAC is protected by virtue of the Conservation of Habitats and Species Regulations 2010 and the Habitats Directive. These require that before permitting an installation which is likely to have a significant effect on a SAC (either alone or in combination with other plans or projects) and which is not directly connected with or necessary to the management of that SAC, we must make an appropriate assessment of the implications for the SAC in view of its conservation objectives.

The SSSIs are protected under the Wildlife and Countryside Act 1981 (as amended by CROW). Section 28I of the 1981 Act requires that before granting a permit for any operation likely to damage any of the designated features of a SSSI, the Environment Agency notifies Natural England and allows it a period in which to comment. The Environment Agency must also take into account any advice it receives from Natural England.

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The LWS/AWs do not receive specific protection in European or domestic law. However, general conservation duties in the Environment Act 1995 and the Natural Environment and Rural Communities Act 2006 are relevant to LWS/AWs. These duties include to:

- have regard to the desirability of conserving and enhancing natural beauty and of conserving flora, fauna and geological or physiographical features of special interest;
- take into account any effect proposals relating to our functions would have on the beauty or amenity of any rural or urban area or on any such flora, fauna and features; and
- have regard, so far as is consistent with the proper exercise of our functions, to the purpose of conserving biodiversity.

5.3.1 Assessment of impact on ecological receptors

The main emission from intensive farms is ammonia. The other key emissions include dust, odour and combustion emissions from boilers used for heating. Odour is an amenity issue and will not impact on ecological receptors, dust is managed through the bio aerosol risk assessment so that smothering of vegetation will not occur, and the size of the combustion equipment is such that the impacts are insignificant.

The nitrogen component of airborne ammonia settles out on land causing a fertilising effect. This process is known as nitrogen deposition. Nitrogen deposition can also result in acidification of land and water. Although nitrogen itself is not acidic it can release acid protons through its transformations in the soil, through processes such as oxidation and nitrification.

We undertook an assessment of the impact of ammonia on the sites listed above.

Ammonia assessment – SAC

In assessing whether ammonia emissions are likely to have a significant effect on a SAC, the following trigger thresholds have been designated:

- If the process contribution (PC) is below 4% of the relevant critical level (CLe) or critical load (CLo) then it may be concluded that there is no likely significant effect and the farm can be permitted with no further assessment.
- Where this threshold is exceeded, further assessment of the farm's likely effect (alone and in combination) is required.
- An in combination assessment will be completed in any event to establish the combined PC for all existing plans and projects identified within 10 km of the SAC.

The Applicant provided detailed modelling which showed that the PC on the River Wye SAC for ammonia emissions and nitrogen deposition from the Installation is under the 4% significance threshold and can be screened out as having no likely significant effect. See results below.

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The Applicant's assessment of impact on the SAC was reviewed by the Environment Agency's technical specialists for modelling, air quality, conservation and ecology technical services, who agreed with the assessment's conclusions, that the proposal does not damage the special features of the SAC.

Table 2 - Ammonia emissions

| Site | Critical level ammonia µg/m³ | Predicted PC μg/m ³ | PC % of critical level |
|---------------|------------------------------|--------------------------------|------------------------|
| River Wye SAC | 3* | 0.043 | 1.43 |
| 4 | | | |

*Natural England advised that a CLe of 3 for ammonia should be applied as there are no sensitive lichens or bryophytes present in this stretch of the River Wye.

Table 3 - Nitrogen deposition

| Site | Critical load kg N/ha/yr [1] | Predicted PC kg N/ha/yr | PC % of critical load |
|--|---------------------------------|-------------------------|-----------------------|
| River Wye SAC | 10 | 0.33 | 3.3 |
| Note - Critical load values taken from APIS website (<u>www.apis.ac.uk</u>) on 14/06/2016. | | | |

Table 4 – Acid deposition

| Site | Critical load keq/ha/yr [1] | Predicted PC keq/ha/yr | PC % of critical load |
|--|-----------------------------|------------------------|-----------------------|
| River Wye SAC | 0.487 | 0.026 | 5.3 |
| Note - Critical load values taken from APIS website (<u>www.apis.ac.uk</u>) on 14/06/2016. | | | |

Screening using the ammonia screening tool version 4.5 has determined that the process contributions of acid deposition from the Installation are over the 4% threshold, and are therefore potentially significant. An in-combination assessment has been carried out. There is one other farm acting in combination with this Application. A detailed assessment has been carried out as shown below.

A search of all existing active plans and projects permitted by the Environment Agency has identified the following farms within 10 km of the maximum concentration point for the River Wye SAC.

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Table 5 – In combination farms assessment for acid deposition

| Name of Farm | PC keq/ha/yr | Critical load keq/ha/yr [1] | PC as % of critical load |
|------------------------------------|----------------------|--------------------------------|--------------------------|
| Bowling Green Farm | 0.026 | 0.487 | 5.3 |
| Arkstone Court | 0.012 | 0.487 | 2.5 |
| Callow Poultry Unit | 0.009 | 0.487 | 1.8 |
| Court Farm Poultry Site | 0.013 | 0.487 | 2.6 |
| Ellislands Farm | 0.012 | 0.487 | 2.5 |
| Flag Station Poultry Farm | 0.004 | 0.487 | 0.9 |
| Gooses Foot Farm | 0.010 | 0.487 | 2.0 |
| Lower Bellamore Farm | 0.011 | 0.487 | 2.3 |
| Merry Hill/Callow | 0.060 | 0.487 | 12.3 |
| Parkway | 0.009 | 0.487 | 1.9 |
| Ridby Court Farm | 0.009 | 0.487 | 1.9 |
| Stocks House Farm | 0.002 | 0.487 | 0.3 |
| Stoney Court Poultry | 0.012 | 0.487 | 2.5 |
| Swinmore Poultry Farm | 0.005 | 0.487 | 1.1 |
| The Court | 0.003 | 0.487 | 0.6 |
| The Grove Farm | 0.010 | 0.487 | 2.0 |
| Thinghill Grange | 0.007 | 0.487 | 1.4 |
| Upper House Poultry | 0.013 | 0.487 | 2.6 |
| Total | | | 17.6 |
| Note 1 - Critical load values take | en from APIS website | (www.apis.ac.uk) on | 14/06/2016. |

It should be noted that the predicted process contributions for each of the farms listed above are calculated using the Environment Agency's ammonia screening tool version 4.5. The values are conservative in their estimate of process contribution and thus predict a greater impact than would be predicted if detailed modelling was undertaken for each farm.

Table 5 shows that the total process contribution at the River Wye SAC from all farms in combination is 17.6% for acid deposition. In line with Environment Agency guidelines, where the total PC is less than 20% of the critical load, in combination impacts can be considered as having no likely significant effect. The total PC for the River Wye SAC from all farms is 17.6% for acid deposition, and therefore we have concluded no likely significant effect from in combination impacts at the SAC. No further assessment is required.

Ammonia assessment - SSSI

The following trigger thresholds have been applied for assessment of the likelihood of damage to any of the designated features of the SSSIs:

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- If the process contribution (PC) is below 20% of the relevant critical level (CLe) or critical load (CLo), then it may be concluded that there is no reasonable likelihood of damage and the farm can be permitted with no further assessment.
- Where this threshold is exceeded further assessment (alone and in combination) is required. An in combination assessment will be completed to establish the combined PC for all existing plans and projects identified within 5km of the SSSI.

Screening using the ammonia screening tool version 4.5 has indicated that the PCs for each of the River Wye, Cage Brook Valley and Little Marsh Common SSSIs are predicted to be less than 20% of the critical level for ammonia emissions, therefore it is possible to conclude that there is no reasonable likelihood of damage. The results of the ammonia screening tool version 4.5 are given in the table below.

Table 6 - Ammonia emissions

| Site | Ammonia Cle (µg/m³) | PC (µg/m³) | PC % critical level |
|--------------------------|---------------------|------------|---------------------|
| River Wye SSSI | 1* | 0.087 | 8.7 |
| Cage Brook Valley SSSI | 1* | 0.043 | 4.3 |
| Little Marsh Common SSSI | 1* | 0.063 | 6.3 |

^{*}A precautionary level of 1 μ g/m³ has been used during the screening. Where the precautionary level of 1 μ g/m³ is used, and the process contribution is assessed to be less than the 20% insignificance threshold in this circumstance it is not necessary to further consider nitrogen deposition or acid deposition critical load values. In these cases the 1 μ g/m³ level used has not been confirmed, but it is precautionary.

Ammonia assessment - LWS/AW

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

• If the process contribution (PC) is below 100% of the relevant critical level (CLe) or critical load (CLo), then the farm is unlikely to significantly adversely impact upon these sites and can be permitted with no further assessment.

Screening using the ammonia screening tool version 4.5 has determined that the PC on each of the LWS/AW sites for ammonia emissions from the Installation is under the 100% significance threshold and can be screened out as having no likely significant effect. See results below.

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Table 7 - Ammonia emissions

| Site | Critical level ammonia µg/m³ | Predicted PC μg/m³ | PC % of critical level |
|-------------------------------------|------------------------------|--------------------|------------------------|
| Pond at Allensmore Court LWS | 1* | 0.1 | 10 |
| Clehonger Village Pond LWS | 1* | 0.21 | 21 |
| Cage Brook LWS | 1* | 0.116 | 11.6 |
| Hayleaseow Wood LWS | 1* | 0.112 | 11.2 |
| Cage Brook Valley and Woodlands LWS | 1* | 0.116 | 11.6 |
| Newton Coppice AW | 1* | 0.072 | 7.2 |
| Old Hill Coppice AW | 1* | 0.052 | 5.2 |
| Priors Shell Wood AW | 1* | 0.049 | 4.9 |
| Sheep Walk Coppice AW | 1* | 0.035 | 3.5 |
| Ruckhall Wood AW | 1* | 0.036 | 3.6 |

^{*} Precautionary CLe of 1 μ g/m³ has been used. Where the precautionary level of 1 μ g/m³ is used, and the process contribution is assessed to be less than 100%, the site automatically screens out as insignificant and no further assessment of critical load is necessary. In these cases, the 1 μ g/m³ level used has not been confirmed, but it is precautionary.

6. Application of Best Available Techniques

We are required by EPR and IED to ensure that the Installation is operated in accordance with BAT.

We have reviewed the operating techniques proposed by the Applicant and compared these with the relevant guidance as set out in Sector Guidance Note EPR6.09 'How to comply with your environmental permit for intensive farming'. Where necessary, we have requested further information from the Applicant.

The Installation will be designed, constructed and operated using BAT for the intensive farming sector. We are satisfied that the operating techniques are BAT for the Installation. Our assessment of BAT is set out below.

6.1 <u>Assessment of Best Available Techniques</u>

6.1.1 Housing design and management

- The poultry housing has a damp proof course.
- The poultry houses are fully insulated with a U-Value of approximately 0.4 W/m2/°C to reduce condensation and heat lost.
- The poultry houses have a fully littered floor equipped with non-leaking drinking systems.

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- In each of the four poultry houses, ventilation is provided by high velocity roof extraction fans with side wall inlets for normal ventilation, and gable end fans for summer cooling purposes. The ventilation management system controls the ventilation rates depending on the health and welfare needs of the birds and the outside weather conditions.
- Litter is kept loose and friable. The quality is regularly inspected to
 ensure it does not become excessively wet or dry. Steps as described
 in SGN EPR6.09 'How to comply with your environmental permit for
 intensive farming' will be taken to rectify any changes to the quality of
 the litter.
- Temperature in the sheds meets the health and welfare needs for the age and number of the birds. Blown hot water radiators are spaced regularly within the sheds to prevent cold spots and extremes of temperature.

We are satisfied that the housing design and management meets the BAT criteria.

6.1.2 Selection and use of feed

Birds will be fed a minimum of three diets during their growth, with gradually reducing levels of protein and phosphorous as bird age increases. Feed is delivered from an Agricultural Industries Confederation accredited feed mill and blown into bulk feed bins situated at the ends of the houses. From the feed bins, the feed is augered into the houses and distributed to the birds via a pan feeding system. We are satisfied that the selection and use of feed is in accordance with the BAT guidance.

6.2 Other Emissions to the Environment

EPR and IED require that the Permit includes ELVs or equivalent parameters for point source and fugitive emissions of certain listed substances (including compounds of nitrogen such as ammonia) and any other substances which are likely to be emitted from the Installation in significant quantities, having regard to their nature and their potential to transfer pollution from one medium to another.

6.2.1 Point source emissions to air

There are high velocity roof fans and gable end fans on poultry houses 1 to 4. No ELVs have been set in the permit. Instead the bird numbers on the site have been restricted in the permit to a specific number. This is considered to be a suitable equivalent parameter to limit ammonia emissions from the farm. The expected ammonia emissions from this number of birds is insignificant. There is also an exhaust from a generator and a vent from a diesel tank. These have no emission limits set as their small size means they are below the threshold of scheduled activities.

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6.2.2 Point source emissions to land

There are no point source emissions to land from this Installation.

6.2.3 Point source emissions to water

Rain water run-off from the roofs and yard is directed across the concrete apron to a diverter valve. It is then discharged to surface water via an attenuation pond. Areas around buildings will be kept free from the build-up of manure, slurry and spilt feed. Footbaths will be managed so they do not overflow. Drainage from the houses and water from washing out will be collected in underground storage tanks. Diverter bungs will be used during wash down periods to prevent the contamination of surface water systems and divert the wash water to the dirty water tanks. Clean drainage systems will not be contaminated. Drainage from yards contaminated by litter or wash water will be collected in the dirty water tanks.

6.2.4 Fugitive emissions to air, land and water

Installations must be able to demonstrate that necessary measures (such as how they are designed and operated) are in place to prevent the unauthorised and accidental release of polluting substances into air, soil, surface water and groundwater. In addition storage requirements for contaminated water must be arranged. We set out below the Applicant's proposals to achieve this.

General Management

Activities on site will be managed in accordance with the site's management systems. This will include regular inspections and maintenance of equipment including air extraction systems to ensure they continue to operate at optimum conditions.

Good housekeeping practices will be applied, such as minimising any dust generating activities on very dry or windy days; regular inspection and cleaning/sweeping of all paved areas on site; and sheeting of lorries for transportation of bedding to the site and export of used litter from the site.

The Applicant reports that all houses, stores and yard areas will benefit from an impermeable surface which will prevent the release of potentially polluting liquids to surface water and groundwater. Measures to minimise the risk of pollution include:

- Areas around buildings will be kept free from build-up of manure, slurry and spilt feed.
- Footbaths will be managed so that they do not overflow.
- Drainage from animal housing and water from cleaning out will be collected in underground storage tanks as shown on the site drainage plan.

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- Diverter bungs will be used during wash down periods to prevent the contamination of surface water systems and to divert the wash water to the dirty water tanks.
- Drainage from yards contaminated by litter or wash water will be collected in a dirty water tanks.
- Spent disinfectants will be added to the dirty water collection tanks.
- Secondary containment will be provided for all tanks containing liquids whose spillage could be harmful to the environment.
- Feed bins are located away from site traffic and provided with collision protection.

Slurry spreading and manure management planning

- Litter is not stored at the Installation.
- Litter is spread on land belonging to the Operator with surplus being sold to third parties.
- Any litter that is exported from the Installation has records kept of the quantities, destination and the date of transfer to separate farming businesses.
- Contingency arrangements are in place with surrounding farms to accept the manure in case of an emergency.
- Litter is spread to land under a manure management plan in accordance with the Code of Good Agricultural Practice.

Dust and bio-aerosols

- Feed is stored in purpose built covered feed silos located next to the broiler sheds. No milling or mixing of feed takes place at the farm. All feed is delivered to the farm by lorry from feed suppliers. Feed is blown directly from the lorry into the storage silos. Feed is piped from the silos to the sheds minimising dust emissions.
- Ventilation systems are operated to achieve optimum humidity levels
 for the stage of production in all weather and seasonal conditions.
 Control of minimum ventilation rates is planned to avoid the build-up of
 moisture in the house. Ventilation is appropriate to the age and weight
 of the animal. The sheds are managed to maintain the poultry litter in
 as dry and friable condition as possible. Dust is controlled through the
 management of litter and air quality.
- Biosecurity measures are in place, appropriate PPE and footbaths are proposed to be used. A veterinary health plan is to be followed.

Odour

 Feed is stored in purpose built covered feed silos located next to the broiler sheds. No milling or mixing of feed takes place at the farm. All feed is delivered to the farm by lorry from feed suppliers. Feed is blown

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- directly from the lorry into the storage silos. Feed is piped from the silos to the sheds minimising odour emissions.
- Ventilation systems are operated to achieve optimum humidity levels for the stage of production in all weather and seasonal conditions. Control of minimum ventilation rates is planned to avoid the build-up of moisture in the house. Ventilation is appropriate to the age and weight of the animal. The sheds are managed to maintain the poultry litter in as dry and friable condition as possible. Odour is controlled through the management of litter and air quality.
- Carcasses are stored in sealed containers awaiting regular collections by licensed renderers.
- Litter is carefully placed onto trailers which are closely parked to the houses. The trailers are immediately sheeted over and removed from site. No litter is stored onsite.
- Houses are cleaned by specialist contractors using DEFRA approved chemicals according to the manufacturer's instructions.

The Environment Agency considers that the Applicant has proposed appropriate measures to minimise any impact of fugitive emissions on nearby sensitive receptors. The proposed procedures satisfy the requirements as set out in SGN EPR6.09 and are considered BAT for this Installation. The Permit conditions (3.2.1 to 3.2.3) are sufficient to ensure that emissions of substances not controlled by emission limits do not cause pollution. The Applicant is required to implement mitigation measures in line with their emissions management plan in the event activities on site are causing pollution.

Based upon the information provided in the Application, we are satisfied that appropriate measures are in place to prevent fugitive emissions to air, land and water.

6.2.5 Pests

Pests, scavenging birds and animals will be minimised by undertaking good housekeeping at the Installation. Feed and carcasses are stored appropriately and any spillages are to be cleaned up immediately. A pest control contract will be in place using a specialist contractor. Appropriate actions will be put into place to prevent and control flies should a nuisance arise.

Based upon the information provided in the Application, we are satisfied that appropriate measures are in place to prevent the presence of pests.

6.2.6 Noise and vibration

Based upon the information in the Application, we are satisfied that 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 site.

Mitigation measures include:

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- Large vehicles driven onto and off of the site with due consideration for neighbours.
- Vehicles to be regularly maintained to reduce noise.
- Roadways are free from potholes and well maintained.
- Vehicle engines not left idling.
- Deliveries to be made during daylight hours.
- Audible reversing warnings not used at night.
- Bird catching carried out at night by trained catchers to reduce stress and disturbance.
- Efficient use of extraction fans and regular maintenance.
- Repairs/alarm tests/contractor duties are all carried out during daylight hours with due care to minimise excessive noise.

The Application did not contain a noise management plan as there are no sensitive receptors within 400m of the Installation. We have therefore included condition 3.4.2 in the Permit which requires the Operator to, if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration.

6.3 Monitoring

As a result of our environmental impact assessment, we have not specified that monitoring should be carried out. Animal numbers have been limited as an equivalent parameter to restrict ammonia emissions. All emissions from the Installation have been considered insignificant. We are satisfied that monitoring is therefore not required for this Installation.

6.4 Records

We have specified the record keeping requirements in condition 4.1 of the Permit to ensure the Applicant will keep and maintain all records, plans and the management system required to comply with the Permit conditions.

6.5 Reporting

We have specified the reporting requirements in condition 4.2 of the Permit to ensure the Applicant will 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.

7 Other legal requirements

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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.

7.1 EPR and related Directives

The EPR delivers the requirements of a number of European and national laws.

7.1.1 Schedules 1 and 7A to EPR – **IED**

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

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

- Article 5 EIAD 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.
- Article 6(2)-6(6) makes 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 Operator has not applied for planning permission at this time.

The Environment Agency has also carried out its own consultation on the Application. The results of our consultation are described elsewhere in this decision document.

7.1.2 <u>Directive 2003/35/EC – The Public Participation Directive</u>

Regulation 59 of the EPR requires the Environment Agency to prepare and publish a statement of its policies for complying with its public participation duties. We have published our PPS which achieves this.

This Application is being consulted upon in line with this PPS, which addresses specifically extended consultation arrangements for determinations

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where public interest is particularly high. This satisfies the requirements of the Public Participation Directive.

Our draft decision in this case has been reached following a programme of extended public consultation, on the Application. The way in which this has been done is set out in Section 2.2. A summary of the responses received to our consultations and our consideration of them is set out in Annexe 1.

7.2 <u>National primary legislation</u>

7.2.1 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 EPR, 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.

(iv) Section 7 (Pursuit of Conservation Objectives)

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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.

As set out at section 5.3 above, we have considered the impact of the Installation on local wildlife sites within 2 km which are not designated as either European Sites or SSSIs. We are satisfied that no additional conditions are required.

(v) Section 39 (Costs and Benefits)

We have a duty to take into account the likely costs and benefits of our decisions on the applications ('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. We are satisfied that the grant of the Permit, with appropriate conditions to protect the environment and human health, takes proper account of likely costs and benefits.

(iv) 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.

7.2.2 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.

7.2.3 Countryside and Rights of Way Act 2000 (CROW 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.

7.2.4 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

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Environment Agency has a duty to consult Natural England in relation to any permit that is likely to damage SSSIs.

As set out at section 5.3 above, we assessed the Application and concluded that the Installation will not damage the special features of any SSSI.

7.2.5 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. As set out at section 5.3 above, we have taken this into account and consider that no different or additional conditions in the Permit are required.

7.3 National secondary legislation

7.3.1 The Conservation of Natural Habitats and Species Regulations 2010

The habitat assessment is summarised in greater detail in section 5.3 of this document.

7.4 Other relevant legal requirements

7.4.1 Duty to Involve

Section 23 of the Local Democracy, Economic Development and Construction Act 2009 require us where we consider it appropriate to take such steps as we consider appropriate to secure the involvement of interested persons in the exercise of our functions by providing them with information, consulting them or involving them in any other way. Section 24 requires us to have regard to any Secretary of State guidance as to how we should do that.

The way in which the Environment Agency has consulted with the public and other interested parties is set out in section 2 of this document. The way in which we have taken account of the representations we have received is set out in Annexe 1. Our public consultation duties are also set out in the EPR, and our statutory PPS, which implement the requirements of the Public Participation Directive. In addition to meeting our consultation responsibilities, we have also taken account of our guidance, the Environment Agency's Building Trust with Communities toolkit.

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ANNEXE 1: Consultation Responses

A) Advertising and Consultation on the Application

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

The Application was advertised on the Environment Agency website from 16 May 2016 to 28 July 2016 and in the Hereford Times on 30 June 2016. The Application was made available to view at the Environment Agency Public Register at Riversmeet House, Northway Lane, Newtown Industrial Estate, Tewkesbury, GL20 8FD.

The following statutory and non-statutory bodies were consulted:

- Herefordshire Council (Environmental Health Department)
- Public Health England (PHE)
- Director of Public Health (Herefordshire Council) (LADPH)
- Health & Safety Executive

1) Consultation Responses from Statutory and Non-Statutory Bodies

| Response received from PHE dated 08/07/2016 | | |
|---|---|--|
| Brief summary of issues raised | Summary of action taken / how this has been covered | |
| Ammonia levels modelled at the site have shown that a number of ecologically sensitive areas may be impacted by ammonia emissions, but the emissions are unlikely to be of a public health concern. We recommend that the Environment Agency consider placing a monitoring condition within the permit to ensure that appropriate ammonia mitigation is working and that odours do not leave the site boundary. | Screening using the ammonia screening tool version 4.5 and detailed modelling provided by the Applicant have concluded that all ammonia emissions from the site are insignificant. A detailed assessment has been carried out as shown in section 5.3.2. Modelling provided by the Applicant has been audited in detail by our Air Quality Modelling and Assessment Unit (AQMAU) and we agree with the report conclusions. We are satisfied that ammonia monitoring is therefore not required. A risk assessment for odour has been carried out. Mitigation measures are incorporated into the Environmental Management System. There is no requirement for an odour management plan as there are no sensitive receptors within 400m. We are satisfied that the proposed measures are appropriate. | |
| Based solely on the information contained in the application provided, PHE has no significant concerns regarding risk to health of the local population from this proposed facility, providing that the applicant takes all appropriate measures | We are satisfied that the appropriate measures to prevent and control pollution are in accordance with our technical guidance note for intensive farming. | |

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to prevent or control pollution, in accordance with the relevant sector technical guidance or industry best practice.

No comments or response received from the following organisations

- Herefordshire Council (Environmental Health Department)
- LADPH
- Health & Safety Executive

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

We have received one consultation response from a member of the public and one from a Local Community Action Group - Allensmore and Clehonger Action Group (ACAG). These responses were wide ranging and a number of the issues raised were outside the Environment Agency's remit in reaching its environmental 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 the EPR and this is what we have done.

a) Representations from Local Community Action Group

Representations were received from ACAG, who raised the following issues.

| Response received from ACAG dated 27/07/16 | | |
|--|--|--|
| Brief summary of issues raised: | Summary of action taken / how this has been covered | |
| Inaccuracies and omissions in the application | | |
| Concerns about the answer to Q2a in Permit Application form – the Applicant answers 'No' to the question about pre-application discussions with the Environment Agency. However, the Environment Agency responded in a letter dated 25/07/14 to the Applicant who had sought pre-application advice. | The Applicant has received pre-application ammonia screening as detailed in a letter dated 25/07/14. They have not received preapplication advice. | |
| Concerns about the answer to Q5a on Plan(s) for the site – there is a Site Drainage plan which gives no indication of scale and does not identify the on-site location of chemical storage. There is no site | The boundary is clearly marked in green as per our guidance. There are no chemicals stored on site. We requested a new plan that is drawn to scale during the determination. | |

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location/boundary plan with the consultation documentation with no identification of fences, hedges or other geographical features recognisable on site.

Concerns about the answer to Q9 – the applicant answers 'No' to the question about whether his proposals have had an environmental impact assessment as part of a planning application.

This revised plan includes fences, hedges and any geographical features. This revised plan now also forms the basis for Schedule 7 to the Permit.

There is currently no planning application in progress for the Installation. We only require to see documents as part of an existing planning application that are relevant to the Permit. We have carried out an assessment of the environmental impact of the installation as part of the Permit determination, see section 5 above.

<u>Inaccuracies and omissions in the Site</u> <u>Condition report</u>

Concerns about inaccuracies regarding lack of visual screening as the farm is visible from several footpaths and rights of way.

Concerns about inaccuracies regarding nearby watercourses. The nearest watercourse mentioned in the report is Cage Brook. There is no mention of the nearby headwaters of a stream, the start of Worm Brook or what it flows into. Expectation that the Applicant should have provided more detailed comment about pollution mitigation measures as the site is within a Nitrate Vulnerable Zone.

Concerns that no monitoring of pollution incidents would be undertaken at the Installation.

The SCR has been assessed and we are satisfied it contains sufficient information to determine the Application.

Permit condition 3.1.1 prevents any emissions being released to water, air or land except those listed in schedule 3 tables S3.1 and S3.2. The only point source emissions to surface water from this Installation is clean yard water and roof water via an attenuation pond. The Installation is on an impermeable surface. All wash water and contaminated yard water on site is contained within the drainage system and diverted to the waste water tanks. We are satisfied that these measures are appropriate to protect local watercourses near the site.

Monitoring is not a requirement in this Permit as all emissions are insignificant (See section 5.3.2 above). The Environmental Management System summary states under 'incidents and abnormal operations' that any deviations from normal operations are logged and dated, with corrective actions noted, listing person/contractor detailed to implement corrective actions, dated and signed. There is a copy of this form in the Application. The emergency plan states that in the event of any major spills, leaks or overflows, the Environment Agency is to be notified.

Sparse information on raw materials

Concerns about the lack of information regarding the raw materials on site.

The Applicant has supplied a raw materials inventory. Chemicals in this inventory are on the Defra Approved Lists. There are no chemicals being stored on site. There are no limits specified as they do not have an impact on environmental emissions.

Recommendation that the Environment

House washing out is carried out by

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Agency requests the approved lists, intended use of raw materials, confirmation of ownership and legal responsibility for the materials and confirmation that materials will be used in compliance with manufacturers' instructions.

specialist contractors using DEFRA approved chemicals observing correct dilution rates. It is the Operator's responsibility to ensure they are applied correctly on site in line with manufacturer's instructions.

Pollution risks to water courses from selfregulating manure management

Recommendation that the Applicant provides a map showing all nearby watercourses with identified risks to water courses from field heaps.

Concerns about the level of staff training in environmental awareness.

Concerns regarding excessive amounts of manure spread in a Nitrate Vulnerable Zone (NVZ).

Request that the Applicant submit a detailed manure management plan before Permit issue.

This information is requested as part of the manure management plan that is agreed with the Environment Agency before any land spreading takes place. Our guidance (SGN6.09 How to comply with your environmental permit for intensive farming) requires that the plan must be in accordance with the DEFRA Codes of Good Agricultural Practices. The plan details extra care required when in a NVZ.

Permit condition 1.1.1(b) requires staff are competent and condition 1.1.2 requires records be kept to demonstrate compliance with 1.1.1.

Operators must ensure that they have enough staff and that they are adequately trained in those aspects which could lead to pollution, including dealing with accidents and their responsibilities under their permit.

Permit conditions 2.3.5 and 2.3.6 requires the operator to take appropriate measures to prevent or minimise pollution and comply with a manure management plan. The plan details extra care required when in a NVZ. The plan must be in accordance with the DEFRA Codes of Good Agricultural Practices.

Manure management plans are inspected at a site compliance visit and is recorded. There is no requirement to submit the plan during the Permit determination process. This plan must be agreed with the Environment Agency local compliance team prior to the Operator spreading any waste to land.

Surface Water Pollution

Concerns regarding contaminated surface water run off moving pesticides and fertilisers off site.

Any wash water and contaminated surface water is contained on the concrete area in front of the houses and drained to underground storage tanks via a diverter drain to await removal from site. No contaminated water is to be diverted to the attenuation pond.

Dirty water storage tanks – tank specifications should be submitted which show they conform to BS 5502-

The Operator has confirmed that the wash water tanks conform to BS 5502-50:1993+A2:2010.

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50:1993+A2:2010 due to slurry's lethal nature.

Concerns the Applicant intends to install a pond outflow and overflow spillway from the attenuation pond to the stream headwaters.

The only water discharged off site is clean yard water and roof water to the attenuation pond. The pond is a treatment in itself for light contamination prior to discharge to surface waters. We do not stipulate conditions to prevent overflow to reach the stream. We are satisfied this is an acceptable approach.

There is no nutrient management plan.

Nutrient management is included in a manure management plan.

The Applicant should submit a map of land he owns showing the risk of run off and a record of steps taken to minimise it. A map of available land and any restrictions to be placed upon the land is a requirement of the manure management plan. This includes controls on the spreading times and duration. The Applicant has confirmed that all landspreading is to be carried out in line with a manure management plan, adhering to the DEFRA Codes of Good Agricultural Practices and dependent on sufficient available spreading acreage.

Pollution Risks to Groundwater

Will farm water come from a borehole? If so will they take too much?

The farm will use a borehole for its water supply. The daily usage will be less than 20m³. They will therefore not require an abstraction licence from the Environment Agency.

Airborne Pollution

Concerns over risks to air quality from ammonia and dust/bio-aerosols – adverse effects on River Jelly Lichen and Bryophytes.

Screening using the ammonia screening tool version 4.5 and detailed modelling provided by the Applicant have concluded that all ammonia emissions from the site are insignificant. A detailed assessment has been carried as shown in section 5.3.2.

Detailed modelling provided by the Applicant has been audited in detail by our Air Quality Modelling and Assessment Unit (AQMAU) and we agree with the report conclusions. Natural England has been consulted and have advised on appropriate critical loads and critical levels due to the absence of sensitive species. Both the Environment Agency and Natural England are satisfied that this is an acceptable approach.

Our guidance requires a bio-aerosol risk assessment only where there are sensitive receptors within 100m of the site. The best available evidence is that bio-aerosol emissions from intensive farming sites return to background levels after 100m.

Consequently, if bio-aerosol levels have returned to background levels, we can assume the process will not have a significant effect on human health.

Annual mean ammonia emissions have been used in the modelling, not considering peaks.

Ammonia emissions are modelled as an annual mean which takes into account short term variations (peaks and troughs). This approach is considered more accurate than modelling short term variations only.

Concerns over the effects of dust on spreading disease.

A risk assessment for fugitive emissions has been carried out which considers dust. Mitigation measures are incorporated into the Environmental Management System. We are satisfied that the proposed measures are appropriate. Our guidance requires a bioaerosol risk assessment only where there are sensitive receptors within 100m of the site. The best available evidence is that bioaerosol emissions from intensive farming sites return to background levels after 100m. Consequently, if bio-aerosol levels have returned to background levels, we can assume the process will not have a significant effect on human health.

Concerns about effect of odour on tourism.

A risk assessment for odour has been carried out. Mitigation measures are incorporated into the Environmental Management System. There is no requirement for an odour management plan as there are no sensitive receptors within 400m. We are satisfied that the proposed measures are appropriate.

Request that the Applicant should install monitoring points, publish dates of flock arrivals and departures and submit code of conduct for managing odour.

We have concluded that all emissions from the site are insignificant therefore monitoring is not required. Publishing the dates of flock movements is not considered necessary as odour mitigation measures are already in place.

Risks to Biodiversity

Concerns that background ammonia levels can be expected to increase if the broiler units are installed.

An assessment of the environmental impact of the proposed installation has been carried out and all emissions are concluded to be insignificant. We are therefore satisfied that appropriate measures are in place to manage emissions and that the proposed installation does not pose a significant risk to protected species and their habitats.

Concerns that litter treatment designed to reduce ammonia results in substantially higher amounts of Nitrogen in the litter.

There is no mention in the Application that the operator is proposing to use chemically treated litter.

Suggestion that heat exchanger units and indirect heating would further reduce ammonia emission rates.

We have concluded that ammonia emissions are insignificant therefore the Operator is not required to implement additional control

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measures. Recommendation that the Environment Membership of the scheme is not a matter for Agency request evidence that the Applicant the Environment Agency to consider during the determination of an application for an is a member of the Countryside Stewardship Scheme. environmental permit. Recommendation that the Environment The number of intensive arming units in a Agency should communicate to county is a matter for the local planning Herefordshire Planning Authority its concerns authority. The Environment Agency will over the number of intensive farming units in consult on environmental issues when the county. requested. Pest Control Inadequate assessment of pests that could A pest control contract will be in place using get offsite e.g. flies and other insects and a specialist contractor. Appropriate actions concerns over management of the problem. will be put into place to prevent and control flies should a nuisance arise. Good housekeeping practices, secure carcass storage and appropriate litter management will deter pests. We are satisfied that these measures are sufficient and in line with the requirements in our guidance (SGN6.09 How to comply with your environmental permit for intensive farming). **Failure to Involve Interested Parties** Local community has no confidence that the All proposals in the Application are Operator will abide by the proposals and incorporated into the Permit and tie in to the measures detailed in the Application. conditions of the Permit. Should the Operator not comply with the proposals and Permit conditions, it would be in breach of the Permit, allowing appropriate enforcement action to be taken. Concerns that the Applicant has made no The Environment Agency encourages attempt to communicate his plans with key applicants to communicate and interact with interested parties and has not attended the public in relation to environmental permit Parish and ACAG meetings. applications as best practice. There is no requirement for the Applicant to directly consult with the public as part of the permit

b) Representations from Individual Members of the Public

One response was received from an individual member of the public.

| Response received from individual members of the public | | |
|---|---|--|
| Brief summary of issues raised: | Summary of action taken / how this has | |
| | been covered | |
| Concerns that the location of the | Decisions over land use are matters for the | |
| proposed Broiler Chicken Houses is too | planning system. The location of the Installation | |
| close to a large settlement which is | is a relevant consideration for Environmental | |
| shortly due to significantly expand (with | Permitting, but only in so far as it has the | |

application process.

family homes) towards the proposed site.

potential to have an adverse environmental impact on communities or sensitive environmental impact is assessed as part of the determination process and has been reported upon in the main body of this document. We have considered the

conclude that it will have no significant effect – see section 5 above.

impact of the site on the sensitive receptors and

