

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Cherry Trees Poultry Farm operated by Mr Adrian Thomas Whittal-Williams, Mrs Josephine Whittal-Williams and Mr Ellis Bernard Whittal-Williams (Trading as EB Whittal-Williams and Partners).

The permit number is EPR/AP3931RY

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document:

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

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

Structure of this document

- Description of main features of the installation
- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising responses

Description of main features of the installation

The installation is operated by EB Whittal-Williams and Partners and comprises four poultry houses, numbered one to four. The four poultry houses provide a combined capacity for 165,000 broiler places. The broilers are brought onto the farm at 1 day old and are depopulated around 28 to 38 days of age.

The poultry houses are ventilated by roof fans with an emission point higher than 5.5 metres above ground level and an efflux speed greater than 11 metres per second. Manure is removed from all four poultry houses, and exported from the installation for spreading on land owned by third parties. Water from the wash out of poultry houses is channelled to an underground

collection tank close to the houses to await export off site. Roof water from all four houses drain to an off-site drainage ditch.

The land around the site is predominantly agricultural. The surrounding topography is relatively flat and low lying. Associated food is stored on the installation in sealed food bins. Mortalities are collected daily and stored in a secure container on site for removal under the National Fallen Stock Scheme. At the end of the cycle the houses are depopulated, washed and disinfected ready for the next cycle.

Key Issues

Previous site

Cherry Trees Poultry Farm was previously permitted under the old permit number EPR/UP3733FU for 140,000 broilers, issued to Green Poultry Partnership LLP. This Limited Liability Partnership was dissolved on the 20/10/2015 and the permit therefore ceased to exist on this date. The site has since been sold on and this new permit is on behalf of the new operator.

Industrial Emissions Directive (IED)

The Environmental Permitting (England and Wales) (Amendment) Regulations 2013 were made on the 20 February and came into force on 27 February 2013. These Regulations transpose the requirements of the IED.

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

Groundwater and soil monitoring

As a result of the requirements of the Industrial Emissions Directive, all permits are now required to contain a condition relating to protection of soil, groundwater and groundwater monitoring. However, the Environment Agency's H5 Guidance states **that it is only necessary for the operator to take samples** of soil or groundwater and measure levels of contamination where there is evidence that there is, or could be existing contamination and:

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

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

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

The site condition report (SCR) for Cherry Trees Poultry Farm (dated 13/05/16) 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 base line reference data for the soil and groundwater at the site at this stage.

Odour

There are sensitive receptors within 400 metres of the installation and therefore an odour management plan has been prepared, as required in chapter 3, section 3.3 of guidance SGN How to comply - Intensive Farming - The EPR Sector Guidance Note 6.09 for intensive pig and poultry farmers, Version 2, published January 2010 (SGN EPR 6.09). The nearest residential properties are as follows:

1. Birches Farm - commercial/residential, located approximately 135m south East
2. Boarding Kennels - commercial/residential, located approximately 178m south south east
3. Fields Place Farm - commercial/residential, located approximately 373m north west
4. Poultry Farm - commercial/residential, located approximately 323m south west
5. Swinmore Cottage Farm – residential, located approximately 125m south west
6. Swinmoor Farm - commercial/residential, located approximately 321m south west
7. Fields Mill - residential, located approximately 310m north west

The residences occupied by people associated with the farm are not considered as sensitive receptors for odour as it is unlikely that odour will be perceived by them as a nuisance. The other properties are all located over 125m from the installation boundary. The general wind direction is from the south west therefore emissions from the farm will not generally be dispersed in the direction of most properties.

An Odour Management Plan (OMP), received 13/05/16 (reference Odour Management Plan), is considered acceptable having been assessed against the requirements of IPPC SRG 6.02 (Farming): Odour Management at Intensive Livestock Installations and with regard to the site specific circumstances at the installation. The operator is required to manage activities at the installation in accordance with condition 3.3.1 and this odour management plan. The odour management plan includes odour control measures, in particular, procedural controls such feed selection, feed delivery and storage, ventilation techniques, carcass disposal and storage, litter management, management of drinking water systems, bird movement on and off site, house washing operations, dust build up, and unexpected odour events. The odour management plan is required to be reviewed at least every 4 years and/or in the instance that a complaint is received, whichever is the sooner.

We are satisfied that operations carried out on the farm will minimise the risk of odour pollution from the installation. There is the potential for odour pollution from the installation. The operator's compliance with their Odour Management Plan, submitted with this application, will minimise the risk of odour pollution beyond the installation boundary and the risk of odour pollution at sensitive receptors beyond the installation boundary is not considered significant.

Noise

There are sensitive receptors within 400 metres of the installation boundary as stated above in the odour section. The applicant has provided a noise management plan (NMP) as part of the application supporting documentation, received 13/05/16 (reference Noise Management Plan).

Operations with the most potential to cause noise nuisance have been assessed as those involving delivery vehicles travelling to and from the farm, vehicles on site, feed transfer from lorries to bins, testing of the alarm system, noise from birds on site, standby generator, maintenance and repairs. The noise management plan covers control measures for each of these potential noise hazards.

The residences occupied by people associated with the farm are not considered as sensitive receptors as it is unlikely that noise will be perceived as a nuisance. The other residences within 400m of the boundary are located over 125m from the installation boundary and further away from the broiler houses and main operations. The majority of other nearby properties are also part of a farm and will therefore experience their own noise emissions.

There is the potential for noise from the installation beyond the installation boundary. However the risk of noise beyond the installation boundary is considered unlikely to cause a nuisance.

Dust & Bioaerosol

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

The closest residential receptor (Cherry Trees Bungalow) is located adjacent to the south west of the installation boundary. All other properties are greater than 100m from the installation boundary. The general wind direction in the area is from the south west. This means that the nearest receptor is generally not downwind of the installation. This, together with good management of the installation, keeping areas clean from build up of dust, other measures in

place to reduce dust and risk of spillages, such as manure and feed management/delivery procedures all reduce the potential for emissions impacting the nearest receptor.

The applicant has also submitted a dust and bioaerosol risk assessment (reference Bioaerosol Emissions at Cherry Trees Farm). The assessment submitted, together with information elsewhere in the application supporting documents, such as the technical standards and odour management plan, are acceptable as a bioaerosol risk assessment and the measures outlined in the application will minimise the potential for dust and bioaerosol emissions from the installation.

Biomass boilers

The applicant is varying their permit to include two biomass boilers with a net rated thermal input of 2.176 MWth.

The Environment Agency has assessed the pollution risks and has concluded that air emissions from small biomass boilers are not likely to pose a significant risk to the environment or human health providing certain conditions are met. Therefore a quantitative assessment of air emissions will not be required for poultry sites where:

- the fuel will be derived from virgin timber, miscanthus or straw, and;
- the biomass boiler appliance and installation meets the technical criteria to be eligible for the Renewable Heat Incentive, and;
- the aggregate boiler net rated thermal input is less than or equal to 4 MWth, and no individual boiler has a net thermal input greater than 1 MWth, and;
- the stack height must be a minimum of 5 metres above the ground (where there are buildings within 25 metres the stack height must be greater than 1 metre above the roof level of buildings within 25 metres) and;
- there are no sensitive receptors within 50 metres of the emission point(s).

This is in line with the Environment Agency's document "Air Quality and Modelling Unit C1127a Biomass firing boilers for intensive poultry rearing", an assessment has been undertaken to consider the proposed addition of the biomass boiler(s).

For poultry sites which do not screen out through the above criteria:

- the aggregate boiler net rated thermal input is:
 - A. less than 0.5MWth, or;
 - B. less than 1MWth where the stack height is greater than 1 metre above the roof level of adjacent buildings (where there are no

adjacent buildings, the stack height must be a minimum of 3 metres above ground), and there are:

- no Special Areas of Conservation, Special Protection Areas, Ramsar sites or Sites of Special Scientific Interest within 500 metres of the emission point(s);
 - no National Nature Reserves, Local Nature Reserves, ancient woodlands or local wildlife sites within 100 metres of the emission point(s), or;
- C. less than 2MWth where, in addition to the above criteria for less than 1MWth boilers, there are:
- no sensitive receptors within 150 metres of the emission point(s).

This is In line with the Environment Agency’s May 2013 document “Biomass boilers on EPR Intensive Farms”, an assessment has been undertaken to consider the proposed addition of the biomass boilers.

The Environment Agency’s risk assessment has shown that the biomass boilers **do not** meet the requirements of criteria above as there is a sensitive receptor within 150 meters of the building and due to the accumulated thermal input >2MWth, and therefore further assessment is required.

Environment Agency Modelling

The assessment of emissions from the biomass boilers has been carried out in accordance with Environment Agency guidance and using the in-house Environment Agency Air Quality Modelling and Assessment Unit (AQMAU) screening tool.

The screening tool was run to calculate the process contribution (PC) from the boilers at the most sensitive local receptor illustrated above. The most sensitive local receptor was identified as Cherrytrees Bungalow to the south of the site. The most sensitive part of this receptor was the north eastern corner of the garden (x,y coordinates: 342546, 240311) due to the prevailing wind direction. The biomass boilers were screened with the following input parameters:

Flue diameter	0.35m
Stack height (from ground level)	7.0m
Adjacent Building heights	6.0m
Flue nominal load temperature	170°C
Flue minimum temperature	120°C
Thermal input in MW or kW per hour	1088kw
Exit velocity in m/sec	16.6m/s
NOx concentration in mg/Nm3	205 (maximum)
CO concentration in mg/Nm3	625 (maximum)
PM10 (dust) concentration in mg/Nm3	40 (maximum)
Stack 1 and 2 grid reference	342538,240355
Closest sensitive receptor (Cherrytrees Bungalow - north west corner of garden) grid reference	342584,240287

The AQMAU screening tool was used to assess the impact of carbon monoxide (CO), nitrogen dioxide (NO₂) and particulates (PM₁₀) emissions from the proposed boiler units on the nearby sensitive receptors. Sulphur dioxide (SO₂) has not been assessed due to the boiler fuel being clean woodchip which is likely to contain very little or no sulphur.

In this assessment the individual PC impact values were combined together by use of the AQMAU screening tool (to give a total cumulative PC from the sixteen boilers) and compared to the relevant environmental standards in the following way. In line with Environment Agency guidance H1 Annex F, process contributions can be considered insignificant if:

- the long term process contribution is <1% of the long term environmental standard; and,
- the short term process contribution is <10% of the short term environmental standard.

Maximum off-site ground level impacts at the most significantly impacted human receptor locations (Cherrytrees Bungalow) are summarised in the tables below.

Table 1 - Predicted Short Term Impacts

Pollutant	EQS / EAL µg/m ³	Process Contribution (PC) µg/m ³	PC as % of EQS / EAL [1] [3]	Back-ground Conc. µg/m ³ [2]	Predicted Environmental Concentration (PEC) µg/m ³	PEC as % of EQS/EAL
NO ₂ (1 hr)	200	105.7	52.83%	14.22	119.89	59.9%
PM ₁₀ (24 hr)	50	4.8	9.66%			
CO (1 hr)	10,000	908.6	9.09%			

Note [1] Representative of worst case impact at Cherrytrees Bungalow.

Note [2] The background concentration is taken as twice the long term background level for Short Term Environmental Quality Standard (EQS) / Environmental Assessment Level (EAL) standards referenced to an hourly averaging value.

Note [3] Where the PC is demonstrated to be less than 10% of the short term EQS/EAL, a level below which we consider to indicate insignificant impact, further consideration of the PEC is not required.

Table 2 - Predicted Long Term Impacts

Pollutant	EQS / EAL µg/m ³	PC as % of EQS / EAL [1]	PC as % of EQS / EAL [2]	Background Conc. µg/m ³	Predicted Environmental Concentration (PEC) µg/m ³	PEC as % of EQS / EAL [3]
NO ₂	40	7.7	19.17%	7.11	14.78	36.9%
PM ₁₀	40	1.5	3.74%	14.83	16.32	40.8%

Note [1] Representative of worst case impact at Cherrytrees Bungalow.

Note [2] Where the PC is demonstrated to be less than 1% of the long term EAL, a level below which we consider to indicate insignificant impact, further consideration of the PEC is not required.

Note [3] Where the PEC is demonstrated to be greater than 70% of the long term EAL, a level below which we consider to indicate as not being a significant impact, more detailed assessment is required.

Screening out emissions which are insignificant

In accordance with Environment Agency guidance, the short term impact of PM₁₀ and CO emissions is considered insignificant as its <10% of the short term EQS/EAL.

Emissions unlikely to give rise to significant pollution

From the tables above the following emissions (which were not screened out as insignificant) have been assessed as being unlikely to give rise to significant pollution in that there is adequate headroom between the predicted environmental concentration (PEC) and the relevant EQS (taking expected modelling uncertainties into account) of both the long term and short term EQS/EAL. These are:

- NO₂ long term; and
- PM₁₀ long term.

For these emissions we have considered the headroom between their PECs and the relevant EQS/EAL standards relative to the predicted PC value for the emission.

It was considered that despite the short term NO₂ result of 59.9% PEC as % of EQS/EAL being below the threshold of 70% PEC as % of EQS/EAL, there was still concern that due to the close proximity of the sensitive receptor, the maximum impact of short term NO₂ identified at x,y: 342583, 240440, which exceeded 100% PEC as % of EQS/EAL, could potentially cause a significant effect to the sensitive receptor under certain weather conditions.

Therefore the applicant provided detailed modelling (reference: 'Cherry Trees AQ Report', dated: 17/08/16) to address short term NO₂ emissions from the biomass boilers. The results from the detailed modelling are shown in Table 3.

Table 3 - Detailed Modelling Predicted Short Term Impacts

Pollutant	EQS / EAL µg/m ³	Process Contribution (PC) µg/m ³	PC as % of EQS / EAL [1] [3]	Back-ground Conc. µg/m ³ [2]	Predicted Environmental Concentration (PEC) µg/m ³	PEC as % of EQS/EAL
NO ₂ (1 hr)	200	75.9	37.9%	11.8	87.7	43.9%

Note [1] Representative of worst case impact at Cherrytrees Bungalow.

Note [2] The background concentration is taken as twice the long term background level for Short Term Environmental Quality Standard (EQS) / Environmental Assessment Level (EAL) standards referenced to an hourly averaging value.

Note [3] Where the PC is demonstrated to be less than 10% of the short term EQS/EAL, a level below which we consider to indicate insignificant impact, further consideration of the PEC is not required.

Emissions unlikely to give rise to significant pollution

From the table above, short term NO₂ (which was not screened out as insignificant) has been assessed as being unlikely to give rise to significant pollution in that there is adequate headroom between the predicted environmental concentration (PEC) and the relevant EQS (taking expected modelling uncertainties into account) of both the long term and short term EQS/EAL.

For these emissions we have considered the headroom between their PECs and the relevant EQS/EAL standards relative to the predicted PC value for the emission.

From this analysis we consider that there will not be any exceedance of an EQS/EAL or any significant pollution caused by the operation of the installation.

Conclusion

All emissions either screen out as being considered insignificant, or where they do not screen out as insignificant are considered unlikely to give rise to an exceedance of any environmental standard or cause significant pollution.

In accordance with the Environment Agency's Air Quality Technical Advisory Guidance 14: "for combustion plants under 5MW, no habitats assessment is required due to the size of combustion plant". Therefore this proposal is considered acceptable and no further assessment is required.

Ammonia emissions

There is one Special Area of Conservation (SAC) site located within 10 kilometres of the installation. There are five Sites of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also seven Local Wildlife Sites (LWS), and two Ancient Woodlands (AW) within 2 km of the installation.

Ammonia assessment – SAC/SPA/Ramsar

The following trigger thresholds have been designated for the assessment of European sites:

- If the process contribution (PC) is below 4% of the relevant critical level (CL_e) or critical load (CL_o) then the farm can be permitted with no further assessment.
- Where this threshold is exceeded an assessment alone and in combination is required.
- An in combination assessment will be completed to establish the combined PC for all existing farms identified within 10 km of the application.

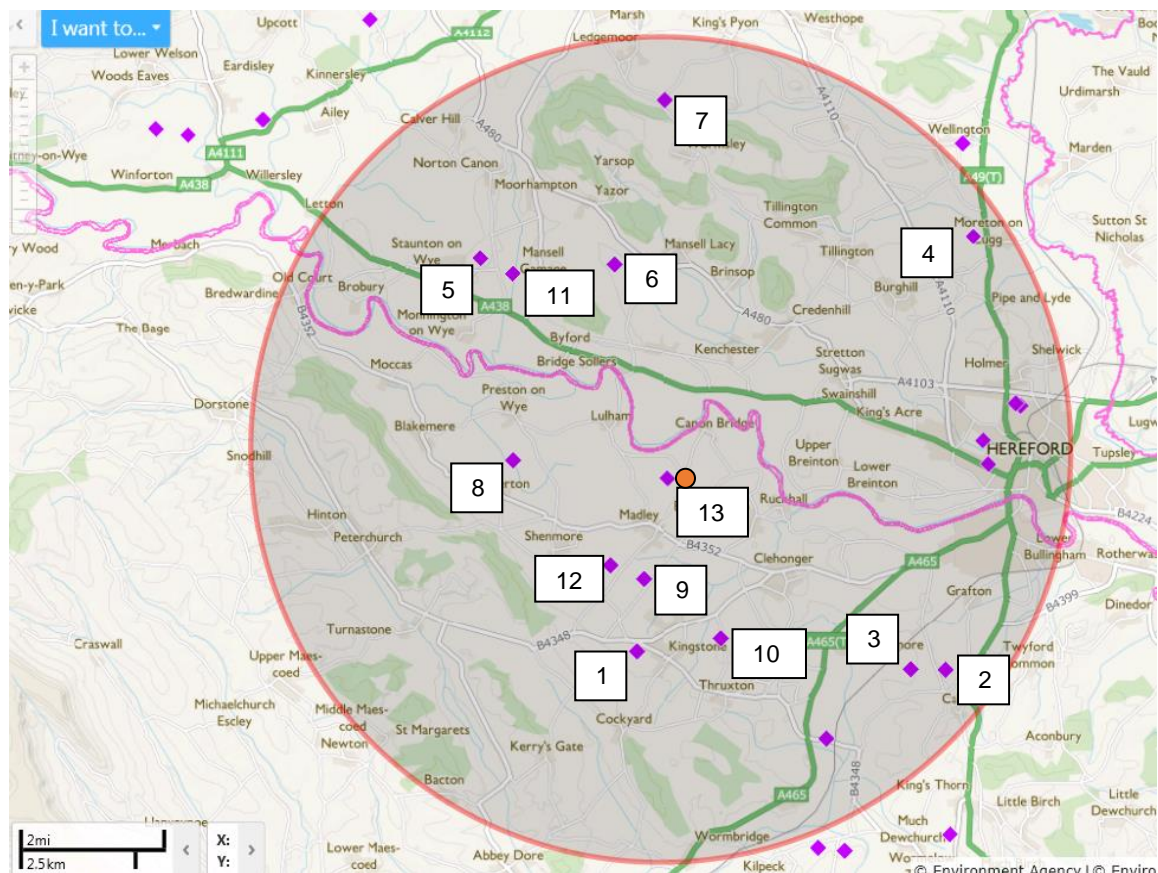
Screening using detailed modelling (reference: *AS Modelling & Data Ltd. A report on the Modelling of the Dispersion and Deposition of Ammonia from the Proposed Broiler Chicken Rearing House at Cherry Trees Farm, Canon Bridge, near Madley in Herefordshire*, dated: 21/04/16) has determined that the process contributions of ammonia emissions and acid deposition from the application site are over the 4% threshold, and can therefore not be screened out as insignificant. 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 intensive agriculture installations permitted by the Environment Agency has identified the following farms within 10 km of the maximum concentration point for River Wye SAC.

Table 4 – In combination farms

Ref.	Name of Farm	Permit number	Easting	Northing
1	Gooses Foot Farm	EPR/JP3037UL	341640	235840
2	Callow Poultry Unit	EPR/PP3333XH	349160	235390
3	Merryhill/Callow	EPR/QP3436KX	348320	235410
4	Upper House Poultry Farm	EPR/TP3536MZ	349840	245900
5	Kilington Manor	EPR/GP3336MD	337820	245370
6	Flag Station Poultry Unit	EPR/MP3839EH	341063	245231
7	Wootton Farm	EPR/FP3436MY	342361	249235
8	Lower Bellamore	EPR/HP3834VC	338705	240435
9	Stoney Court Poultry Farm	EPR/PP3833UW	341992	237498
10	Arlstone Court	EPR/EP3236ZU	343689	236151
11	Scutt Mill	EPR/TP3739AF	338608	245064
12	Parkway	EPR/KP3636MX	340984	237958
13	Swinmoor Farm	EPR/KP3439RZ	342439	240053

Figure 1 – Location of in combination farms



An assessment of ammonia emissions at the maximum concentration point for the application has been carried out.

A critical level of 3 µg/m³ has been assigned to the River Wye SAC as confirmed through discussions with Natural England. Nitrate deposition was also confirmed by Natural England as not needing to be considered for the River Wye SAC. The assessment will consider the deposition of acidification against relevant Critical Loads (CLO). APIS (<http://www.apis.ac.uk/>) states that the river habitat is not sensitive to acidity. However, in agreement with Natural England the adjacent habitats to the river have been selected. As the majority of the habitat adjacent to the river was improved grassland, which is also not sensitive to acidity, broadleaved woodland was selected as a conservative option for the appropriate sensitive habitat as there are a number of trees lining the river (email reference: *river critical loads and hotspot near River Lugg/ River Wye confluence*, dated 25/08/16).

The results for Cherry Trees Poultry Farm and the neighbouring Swinmoor Farm have been assessed by the Environment Agency's Air Quality Modelling and Assessment Unit (AQMAU) in combination to derive the combined effects (reference: *AQMAU_C1447_RP01 In-combination assessment for Cherry Tree Farm and Swinmoor Farm*, dated: 06/09/16). The combined results as identified by the Environment Agency have therefore been provided in Table 5 and Table 6 below. All other sites were excluded due to the process contribution being lower than 4%.

The results presented below for the in combination assessment are for the maximum point of concentration on the River Wye SAC.

Table 5 - In combination process contribution of ammonia at the SAC

Application	Reference Number	Receptor location [1]	Estimated NH ₃ PC (µg/m ³)	% PC of Cle [2]
Gooses Foot Farm	EPR/JP3037UL	SAC	0.042	1.4
Callow Poultry Unit	EPR/PP3333XH	SAC	0.005	0.2
Merryhill/Callow	EPR/QP3436KX	SAC	0.038	1.3
Upper House Poultry Farm	EPR/TP3536MZ	SAC	0.049	1.6
Kilington Manor	EPR/GP3336MD	SAC	0.018	0.6
Flag Station Poultry Unit	EPR/MP3839EH	SAC	0.034	1.1
Wootton Farm	EPR/FP3436MY	SAC	0.018	0.6
Lower Bellamore	EPR/HP3834VC	SAC	0.099	3.3
Stoney Court Poultry Farm	EPR/PP3833UW	SAC	0.085	2.8
Arlstone Court	EPR/EP3236ZU	SAC	0.064	2.1
Scutt Mill	EPR/TP3739AF	SAC	0.074	2.5
Parkway	EPR/KP3636MX	SAC	0.095	3.2
Swinmoor Farm ^[3]	EPR/KP3439RZ	SAC	0.283	9.4
Cherry Trees Poultry Farm ^[3]	EPR/AP3931RY	SAC		
Total (ΣPCs)			0.283	9.4

Note 1: This was taken as the point greatest impact on the River Wye SAC by Cherry Trees Poultry Farm, x,y: 342606, 240975

Note 2: For in-combination assessments we only consider PCs over 4% of the Cle

Note 3: The results for Cherry Trees Poultry Farm and Swinmoor Farm have been combined following an assessment by the Environment Agency

For the farms whose process contribution is more than 4%, the combined sum of the PCs at the River Wye SAC is less than 20% of the CLe for ammonia emissions. It is therefore possible to conclude no adverse effect in combination.

Table 6 - In combination process contribution of acidification

Application	Reference Number	Receptor location [1]	Estimated acid deposition PC (keq/ha/yr)	PC % of Clo ^[2]
Gooses Foot Farm	EPR/JP3037UL	SAC	0.016	0.9
Callow Poultry Unit	EPR/PP3333XH	SAC	0.002	0.1
Merryhill/Callow	EPR/QP3436KX	SAC	0.014	0.8
Upper House Poultry Farm	EPR/TP3536MZ	SAC	0.018	1.1
Kilington Manor	EPR/GP3336MD	SAC	0.007	0.4
Flag Station Poultry Unit	EPR/MP3839EH	SAC	0.013	0.7
Wootton Farm	EPR/FP3436MY	SAC	0.007	0.4
Lower Bellamore	EPR/HP3834VC	SAC	0.037	2.2
Stoney Court Poultry Farm	EPR/PP3833UW	SAC	0.031	1.9
Arlstone Court	EPR/EP3236ZU	SAC	0.024	1.4
Scutt Mill	EPR/TP3739AF	SAC	0.028	1.6
Parkway	EPR/KP3636MX	SAC	0.035	2.1
Swinmoor Farm ^[3]	EPR/KP3439RZ	SAC	0.105	6.2
Cherry Trees Poultry Farm ^[3]	EPR/AP3931RY	SAC		
Total (ΣPCs)			0.105	6.2

Note 1: This was taken as the point greatest impact on the River Wye SAC by Cherry Trees Poultry Farm, x,y: 342606, 240975

Note 2: For in-combination assessments we only consider PCs over 4% of the Clo

Note 3: The results for Cherry Trees Poultry Farm and Swinmoor Farm have been combined following an assessment by the Environment Agency

For the farms whose process contribution is more than 4%, the combined sum of the PCs at the Habitats site is less than 20% of the Clo for acid deposition. It is therefore possible to conclude no adverse effect in combination.

Table 5 and 6 shows that the total process contribution at River Wye SAC from all farms in combination is 9.4% for ammonia emissions and 6.2% for acid deposition. In line with Environment Agency guidelines, where the total PC is less than 20% of the critical level/load, in combination impacts can be considered as having no adverse effect.

No further assessment is required.

Ammonia assessment – SSSI

The following trigger thresholds have been applied for assessment of SSSIs:

- If the process contribution (PC) is below 20% of the relevant critical level (CLe) or critical load (CLo) then the farm can be permitted with no further assessment.
- Where this threshold is exceeded an assessment alone and in combination is required. An in combination assessment will be completed to establish the combined PC for all existing farms identified within 5 km of the application.

Initial screening using the ammonia screening tool version 4.5 has indicated that emissions from Cherry Trees Poultry Farm will only have a potential impact on SSSI sites with a precautionary critical level of $1\mu\text{g}/\text{m}^3$ if they are within 922 metres of the emission source.

Beyond 922m the PC is less than $0.2\mu\text{g}/\text{m}^3$ (i.e. less than 20% of the precautionary $1\mu\text{g}/\text{m}^3$ critical level) and therefore beyond this distance the PC is insignificant. In this case the SSSIs beyond this distance (see table below) and therefore screen out of any further assessment.

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

Table 7 – SSSI Assessment

Name of SSSI	Distance from site (m)
Bishon Meadow	3,116m
The Filts	4,244m
Cage Brook Valley	2,871m
Littlemarsh Common	2,741m

Screening using the ammonia screening tool version 4.5 has indicated that the PC for the River Wye SSSI is predicted to be less than 20% of the critical level for ammonia emissions and acid deposition therefore it is possible to conclude no damage. The results of the ammonia screening tool version 4.5 are given in the tables below.

Table 8 – Ammonia emissions

Site	Ammonia Cle ($\mu\text{g}/\text{m}^3$)	PC ($\mu\text{g}/\text{m}^3$)	PC % critical level
River Wye SSSI	3*	0.513	17.1

*e.g. Natural England advised that a CLe of 3 for ammonia should be applied across the River Wye SSSI (email reference: *river critical loads and hotspot near River Lugg/ River Wye confluence*, dated 25/08/16).

Table 9 – Acid deposition

Site	Critical load keq/ha/yr [1]	PC keq/ha/yr	PC % critical load
River Wye SSSI	1.69	0.190	11.2

Note [1] Critical load values taken from APIS website (www.apis.ac.uk) – 29/08/16

No further assessment is required.

Ammonia assessment – LWS & AW

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

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

Initial screening using ammonia screening tool version 4.5 has indicated that emissions from Cherry Trees Poultry Farm will only have a potential impact on the LWS & AW sites with a precautionary critical level of 1µg/m³ if they are within 316 metres of the emission source.

Beyond 316 metres the PC is less than 1µg/m³ and therefore beyond this distance the PC is insignificant. In this case all LWS & AW are beyond this distance (see table below) and therefore screen out of any further assessment.

Table 10 – LWS & AW Assessment

Name of LWS or AW	Distance from site (m)
Field near Bage Mill LWS	1,227m
Warlow Pool LWS	632m
Pond near Longmoor cottage LWS	930m
Honeymoore Common LWS	1,929m
Bucknall's Wood LWS	1,950m
River Wye LWS	506m
Eaton Bishop Church LWS	2,095m
Ash Coppice AW	1,029m
Bucknells Wood AW	2,027m

No further assessment is necessary

Annex 1: decision checklist

This document should be read in conjunction with the application, supporting information and permit/notice.

Aspect considered	Justification / Detail	Criteria met
		Yes
Receipt of submission		
Confidential information	A claim for commercial or industrial confidentiality has not been made.	✓
Identifying confidential information	We have not identified information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on commercial confidentiality.	✓
Consultation		
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with our Public Participation Statement and our Working Together Agreements. For this application we consulted the following bodies: <ul style="list-style-type: none"> • Public Health England • Director of Public Health • Health and Safety Executive • Environmental Health - Herefordshire Council • Food Standards Agency 	✓
Responses to consultation and web publicising	The web publicising and consultation responses (Annex 2) were taken into account in the decision. The decision was taken in accordance with our guidance.	✓
Operator		
Control of the facility	We are satisfied that the applicant (now the operator) is the person who will have control over the operation of the facility after the grant of the permit. The decision was taken in accordance with our guidance on what a legal operator is.	✓
European Directives		
Applicable directives	All applicable European directives have been considered in the determination of the application.	✓
The site		
Extent of the site of the facility	The operator has provided plans which we consider are satisfactory, showing the extent of the site of the facility. The plans are included in the permit and the operator is required to carry on the permitted activities within the site boundary.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Site condition report	<p>The operator has provided a description of the condition of the site.</p> <p>We consider this description is satisfactory. The decision was taken in accordance with our guidance on site condition reports and baseline reporting under IED– guidance and templates (H5).</p> <p>The operator has identified the following management methods to ensure that the site does not impact the groundwater:</p> <ul style="list-style-type: none"> • Routine weekly maintenance of fuel and chemical storage area, drainage system and wash down tanks. • 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. Clean drainage systems will not be contaminated. • Lightly contaminated yard wash directed to underground tank. • The wash water tanks will be built to conform to specifications in SGN EPR6.09 ‘How to comply with your environmental permit for intensive farming’. • Spent disinfectants will be added to the dirty water collection tanks. • The fuel oil storage tanks for the generator and back up boiler are bunded. The bund meet the requirements of the Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) Regulations 2010 (SSAFO Regulations) and meet the requirements outlined in SGN EPR6.09 ‘How to comply with your environmental permit for intensive farming’. The tank will be regularly inspected. • Pesticides and veterinary medicines will be kept in a store capable of retaining spillage, resistant to fire, dry, frost free and secure. 	✓
Biodiversity, Heritage, Landscape and Nature Conservation	<p>The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat.</p> <p>A full assessment of the application and its potential to affect the sites/species/habitats has been carried out as part of the permitting process. We consider that the application will not affect the features of the site/species/habitat. Please see the ammonia emissions section of key issues for further details.</p> <p>Formal consultation has been carried out with Natural England. Natural England agreed with the conclusions of the</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	combined Appendix 11 and 12 (reference: 'Application Bespoke - Natural England Consultation', dated 07/09/2016).	
Environmental Risk Assessment and operating techniques		
Environmental risk	<p>We have reviewed the operator's assessment of the environmental risk from the facility.</p> <p>The operator's risk assessment is satisfactory.</p> <p>The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment [or similar methodology supplied by the operator and reviewed by ourselves], all emissions may be categorised as environmentally insignificant.</p>	✓
Operating techniques	<p>We have reviewed the techniques used by the operator and compared these with the relevant guidance notes.</p> <p>The operator has proposed the following key techniques:</p> <ul style="list-style-type: none"> • Dirty water storage facilities are in place on site; • The new building is fan ventilated with a fully littered floor and equipped with non-leaking drinking systems; • The new building has high velocity ventilation. • All housing is built to Best Available Techniques (BAT). <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in Sector Guidance Note (SGN) EPR6.09 'How to comply with your environmental permit for intensive farming (version 2)' and we consider them to represent appropriate techniques for the facility.</p> <p>We consider that the operating techniques specified in the permit reflect the BAT for the installation.</p>	✓
The permit conditions		
Incorporating the application	<p>We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process.</p> <p>These descriptions are specified in the Operating Techniques table in the permit.</p>	✓
Operator Competence		
Environment management system	<p>There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with our guidance on what a competent operator is.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
Relevant convictions	The Case Management System has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found.	✓
Financial provision	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with our guidance on what a competent operator is.	✓

Annex 2: Consultation and web publicising advertising responses

Summary of responses to consultation and web publication, and the way in which we have taken these into account in the determination process.

<i>Response received from</i>
Public Health England – Dr Chris Jewell, Environmental Public Health Scientist (dated 18/07/16)
<i>Brief summary of issues raised</i>
<p>We recommend that any Environmental Permit issued for this site should contain conditions to ensure that the following potential emissions do not impact upon public health: odour, fugitive emissions of ammonia and dust to air from feed and litter.</p> <p>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 activity, providing that the applicant takes all appropriate measures to prevent or control pollution, in accordance with the relevant sector technical guidance or industry best practice.</p>
<i>Summary of actions taken or show how this has been covered</i>
<p>We have carried out biomass boiler emissions modelling to determine that there was no significant effect caused to human health for nearby receptors. The Odour Management Plan, Noise Management Plan and Bioaerosol Risk Assessment have all been deemed suitable.</p>

Consultation responses were not received from:

- Director of Public Health
- Health and Safety Executive
- Environmental Health – Herefordshire Council
- Food Standards Agency