

Environment Agency permitting decisions

Variation

We have decided to issue the variation for Arkstone Court operated by Mr William Watkins.

The variation number is EPR/EP3236ZU/V003.

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

- Key issues
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising responses

Key issues of the decision

Ammonia Emissions

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

Ammonia Assessment – SAC

The following trigger thresholds have been designated for assessment of European sites including Ramsar sites.

- If the Process Contribution (PC) is below 4% 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 overlapping in combination assessment will be completed where existing farms are identified within 10km of the application.

Screening using Ammonia Screening Tool 4.4 has indicated that emissions from Arkstone Court Farm will only have a potential impact on sites with a critical level of $1^* \mu\text{g}/\text{m}^3$ if they are within 3637m of the emission. Screening indicates that beyond this distance, the Process Contribution at conservation sites is less than 4% of $1\mu\text{g}/\text{m}^3$ which means that beyond this distance the PC is insignificant.

Table 1 – distance from source

Site	Distance (m)
River Wye	3658

*A precautionary critical level of $1 \mu\text{g}/\text{m}^3$ has been assigned to this site. Where the precautionary level of $1\mu\text{g}/\text{m}^3$ is used, and the process contribution is assessed to be less than the 4% insignificance threshold in this circumstance it is not necessary to further consider Nitrogen Deposition or Acidification Critical Load values.

No further assessment is necessary.

Ammonia Assessment – SSSI's

The following trigger thresholds have been applied for assessment of SSSI's. 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 in-combination assessment and/or detailed modelling may be required.

Screening using the Ammonia Screening Tool (v4.4) has indicated that the PC for below SSSIs is predicted to be less than 20% Critical Level for ammonia, acid and N deposition therefore it is possible to conclude no damage. The results of the ammonia screening tool v4.4 are given in the tables below.

Table 2 – Ammonia Emissions

Name of SSSI	Ammonia Cle ($\mu\text{g}/\text{m}^3$)	PC ($\mu\text{g}/\text{m}^3$)	PC as % of Critical level
Wormbridge Common SSSI	$1\mu\text{g}/\text{m}^3$ *	0.025	2.5
Cage Brook Valley SSSI	$1\mu\text{g}/\text{m}^3$ *	0.151	15.1
Littlemarsh Common SSSI	$1\mu\text{g}/\text{m}^3$ *	0.153	15.3
River Wye SSSI	$1\mu\text{g}/\text{m}^3$ *	0.040	4

* A precautionary level of $1\mu\text{g}/\text{m}^3$ has been used during the screen. Where the precautionary level of $1\mu\text{g}/\text{m}^3$ 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 Acidification Critical Load values. In these cases the $1\mu\text{g}/\text{m}^3$ level used has not been confirmed, but it is precautionary.

No further assessment is necessary.

Ammonia assessment – LWS and AW.

There are six Local Wildlife Sites (LWS) and two Ancient Woodlands within 2 km of Arkstone Court Farm. The following trigger thresholds have been applied for the assessment of these sites.

1. If PC is < 100% of relevant Critical Level or Load, then the farm can be permitted (H1 or ammonia screening tool)
2. If further modelling shows PC <100%, then the farm can be permitted.

For the following sites this farm has been screened out at Stage 1, as set out above, using results of the Ammonia Screening Tool version 4.4.

Screening using Ammonia Screening Tool 4.4 has indicated that emissions from Arkstone Court Farm will only have a potential impact on sites with a critical level of $1\mu\text{g}/\text{m}^3$ if they are within 434m of the emission. Screening indicates that beyond this distance, the Process Contribution at conservation sites is less than $1\mu\text{g}/\text{m}^3$. $1\mu\text{g}/\text{m}^3$ is 100% of the $1\mu\text{g}/\text{m}^3$ critical level and therefore beyond this distance the PC is insignificant. In this case all local wildlife sites below are beyond this distance.

Table 3 – distance from source

Site	Distance (m)
Wallbrook Wood AW	561
Arkstone Common LWS	527
Cage Brook LWS	1,153
Littlemarsh Common LWS	1,497
Kingstone Common LWS	732
Honeymoon Common LWS	2,001
Whitfield LWS	945
Heirons Wood AW	1,952

The PC at these sites has been screened as insignificant. It is possible to conclude no significant pollution will occur at these sites and no further assessment is required.

No further assessment for these sites is required.

Biomass boiler

The applicant is varying their permit to include 2 new biomass boilers with a net rated thermal input of 0.435 MW. This will result in six biomass boilers on site in total with a net rated thermal input of 1.31 MW.

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.

This guidance states that 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 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:
 - 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).

Our risk assessment has shown that six biomass boilers will use virgin timber and straw, meet the criteria to be eligible for the RHI and meet the requirements of criteria C above, and are therefore considered not likely to pose a significant risk to the environment or human health and no further assessment is required. Although there are habitats sites within the screening distance for assessing ammonia emissions, they are not within the distances specified in criteria B above.

Annex 1: decision checklist

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

Aspect considered	Justification / Detail	Criteria met
		Yes
Consultation		
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.	✓
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 EPR RGN 1 Understanding the meaning of operator.	✓
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 a plan which we consider is satisfactory, showing the extent of the site of the facility. A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.	✓
Site condition report	The operator has provided a description of the condition of the site. 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).	✓
Biodiversity, Heritage, Landscape and Nature Conservation	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat . A full assessment of the application and its potential to affect the sites has been carried out as part of the permitting process. We consider that the application will not affect the features of the sites.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	We have not formally consulted on the application. The decision was taken in accordance with our guidance. See Key Issues for details.	
Environmental Risk Assessment and operating techniques		
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is satisfactory. The assessment shows that, applying the conservative criteria in our guidance on Environmental Risk Assessment all emissions may be categorised as environmentally insignificant. See Key Issues for details.	✓
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes. The proposed techniques for priorities for control are in line with the techniques contained in the 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. The permit conditions ensure compliance with relevant BREFs and BAT Conclusions, and ELVs deliver compliance with BAT-AELs.	✓
The permit conditions		
Updating permit conditions during consolidation.	We have updated previous permit conditions to those in the new generic permit template as part of permit consolidation. The new conditions have the same meaning as those in the previous permit(s). The operator has agreed that the new conditions are acceptable.	✓
Raw materials	We have specified limits and controls on the use of raw materials and fuels.	✓
Incorporating the application	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. These descriptions are specified in the Operating Techniques table in the permit.	✓
Operator Competence		
Environment management system	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 RGN 5 on Operator Competence.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
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 RGN 5 on Operator Competence.	✓

Annex 2: Consultation and web publicising responses

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

Response received from
Health and Safety Executive on 19/05/14
Brief summary of issues raised
No comments to make.
Summary of actions taken or show how this has been covered
n/a

Environmental Health and Planning Department of Herefordshire Council were consulted. There were no responses received.

This proposal was also publicised on our website between 13/05/14 and 11/06/14 and no representations were received.