

Environment Agency permitting decisions

Bespoke permit

We have decided to grant the permit for Smite Lane Farm operated by Mr Richard Ogden.

The permit number is EPR/RP3831VV.

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.

Description of the main features of the Installation

Smite Lane Farm is situated approximately 700 metres Southwest of the village of Thoroton. The installation is approximately centred on National Grid Reference SK 75885 41505.

The installation is operated by Mr Richard Ogden, comprising of four poultry houses, with a capacity of 212,000 broiler places designed for the rearing of chicken for meat production. Birds are housed at day old and depopulated at around 32 to 42 days of age with approximately seven days empty.

Houses are heated by a biomass boiler with a thermal input of 1.071MW. The biomass boiler is fuelled by biomass wood chips comprising virgin timber, straw, miscanthus; or a combination of these. LPG fuelled back up boilers are located in the biomass boiler building in case of biomass boiler failure.

All four poultry houses are ventilated by high velocity ridge fan outlets with an efflux velocity greater than 11m/s. Each house also has gable end fans although these are operated infrequently to maintain temperature, typically in the summer months.

At the end of the growing period, all birds are removed from the houses and the litter is removed from the site and spread on operator controlled land in compliance with the manure management plan. Contingency arrangements are in place with surrounding third party owned farms to accept the manure in case of an emergency. The houses are then pressure washed, disinfected and dried out prior to the cycle beginning again. Dirty wash water is collected in underground storage tanks. Diverter bungs are used during wash down periods to prevent the contamination of surface water systems and to divert the wash water to the dirty water tanks. Roof water from the poultry houses drains via guttering and down spouts into solid piping and on to an attenuation pond located to the south of the poultry houses, which is unlined and acts as a partial soakaway. The pond has an outlet to a surface water ditch, marked as Back Drain, to the south of the installation, which ultimately drains to the River Smite.

Fallen stock during the production cycle will be collected and recorded daily, and stored in a secure container prior to collection by a licensed agent under the National Fallen Stock Scheme.

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

Industrial Emissions Directive (IED)

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

This permit implements the requirements of the EU 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 (in this permit condition 3.1.3 has been included). 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 the 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 your 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 Smite Lane Farm (received 21/10/15) demonstrated 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 SCRs, we accept that they have not provided baseline reference data for the soil and groundwater at the site at this stage, and although condition 3.1.3 is included in the permit no soil or groundwater monitoring will be required.**

Ammonia emissions

There are no Special Areas of Conservation (SAC), Special Protection Areas (SPA) or Ramsar sites located within 10 kilometres (km) of the installation. There is 1 Site of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 5 Local Wildlife Sites within 2 km of the installation.

Ammonia assessment – SSSIs

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 in combination assessment and/or detailed modelling may be required.

Initial screening using Ammonia Screening Tool version 4.4 (AST v4.4) has indicated that emissions from Smite Lane 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 1089 metres (m) of the emission source.

Initial screening indicates that beyond 1089m 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. Orston Plaster Pits is beyond this distance (see table below) and therefore screens 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 1 – SSSI Assessment

Name of SSSI	Distance from site (m)
Orston Plaster Pits	1,287

No further assessment is required.

Ammonia assessment - LWS/AW/LNR

There are 5 Local Wildlife Sites (LWS) within 2 km of Smite Lane 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). Revised screening was completed on 24/11/2015 as original pre-application screening was completed in June 2014.

Screening using ammonia screening tool (version 4.4) has indicated that emissions from Smite Lane 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 373m of the emission source. Screening indicates that beyond this distance, the PC at conservation sites is less than $1 \mu\text{g}/\text{m}^3$. $1 \mu\text{g}/\text{m}^3$ is 100% of the $1 \mu\text{g}/\text{m}^3$ CLe and therefore beyond this distance the PC is insignificant. In this case all LWSs are beyond this distance.

Table 2 – distance from source

Site	Distance (m)
River Smite	620
Railway Pond, Orston	1,409
Orston Railway	1,785
Orston Horse Pasture	1,167
Orston Quarry and Grasslands	1,287

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 has applied to include a biomass boiler with a net rated thermal input of 1.071 MW.

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:
 - 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 boiler.

The Environment Agency's risk assessment has shown that the biomass boiler meets the requirements of criteria C above, and is therefore considered not likely to pose a significant risk to the environment or human health and no further assessment is required.

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.

Annex 1: decision checklist

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

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	<p>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.</p> <p>For this application we consulted the following bodies:</p> <ul style="list-style-type: none"> • Health and Safety Executive • Environmental Health (Rushcliffe Borough Council) 	✓
Responses to consultation and web publicising	<p>The web publicising and consultation responses (Annex 2) were taken into account in the decision.</p> <p>The decision was taken in accordance with our guidance.</p>	✓
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.	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
The site		
Extent of the site of the facility	<p>The operator has provided a plan which we consider is satisfactory, showing the extent of the site of the facility.</p> <p>A plan is included in the permit and the operator is required to carry on the permitted activities within the site boundary.</p>	✓
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>	✓
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>Ammonia:</p> <p>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.</p> <p>Please refer to key issues section ‘Ammonia emissions’ above for further information.</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p> <p>Biomass Boiler:</p> <p>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.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	Please refer to key issues section 'Biomass boiler' above for further information.	
Environmental Risk Assessment and operating techniques		
Environmental risk	<p>We have carried out a risk assessment on behalf of the operator.</p> <p>See key issues section 'Biomass boiler' above for further information.</p>	✓
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, 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 operating techniques are as follows:</p> <ul style="list-style-type: none"> • Ventilation is provided by high velocity roof mounted extraction fans (efflux velocity greater than 11m/s), with side wall air inlets. • Each house also has gable end fan outlets used infrequently for temperature control in hot weather • The houses are fully littered floor equipped with non-leaking drinking systems. • Litter is exported offsite and spread on operator's own land • Contingency arrangements are in place with surrounding farms to accept the manure in case of an emergency. • Dirty wash water from cleaning out will be collected in underground storage tanks. • Rainwater run-off will be collected by the guttering system and routed to the attenuation pond, with an outlet to surface water. • Fallen stock is disposed of in accordance with the current Animal By-Products Regulations. Carcasses will be stored in sealed vermin proof containers 	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>awaiting regular collection by a licensed renderer.</p> <ul style="list-style-type: none"> All houses are heated by means of one biomass boilers, with LPG heater installed as back up The biomass fuel is derived from virgin timber The biomass boiler appliance and it's installation meets the technical criteria to be eligible for the Renewable Heat Incentive The biomass boiler stacks are 1m or more higher than the apex of the adjacent buildings. <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in the SGN EPR6.09 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.</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>	✓
Emission limits	We have decided that emission limits should be not set in the permit.	✓
Raw materials	<p>We have specified limits and controls on the use of raw materials and fuels.</p> <p>We have specified that only virgin timber (including wood chips and pellets), straw, miscanthus or a combination of these. These materials are never to be mixed with or replaced by, waste.</p>	✓
Emission limits	We have decided that emission limits should not be set in the permit.	✓
Operator Competence		
Environment	There is no known reason to consider that the operator	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
management system	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.	
Relevant convictions	The National Enforcement Database has been checked to ensure that all relevant convictions have been declared. No relevant convictions were found. The operator satisfies the criteria in RGN 5 on Operator Competence.	✓
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 and the way in which we have taken these into account in the determination process.

Response received from
Rushcliffe Borough Council – Environmental Health (Date received: 13/11/15)
Brief summary of issues raised
<p>The response included their comments for the planning application consultation which included the following:</p> <ol style="list-style-type: none">1. Consideration of the odour assessment report and agreement with its conclusion that it is satisfactory as it meets the benchmark set by the EA of $3.0\text{ou}_E/\text{m}^3$ as a 98th %ile at the nearest receptor which is over 400m away.2. Consideration of the noise report and agreement with the conclusion that there is not a significant impact on the nearest receptor. The fans identified in the report must be the ones used on poultry houses 1– 4 with noise attenuators fitted on two of the houses.3. Commented on the need for security lighting at the installation and details on how the lighting should be installed.4. Identified manure will not be stored on site and will be removed directly from site during clean out phases and agreed that no controls should be put in place for the storage of manure. Recommended putting conditions in place to prevent manure storage.5. Identified the installation of a biomass boiler on the site and the fact that this would be considered by the EA when permitting the site. Recognised the boiler would not impact the air quality as there are no receptors within 400m of the site. <p>Also included was the case log history, detailing complaints made regarding the odour from the pig farm at Smite Lane Farm. These fall between the dates 04/06/1998 to 08/06/2006.</p>
Summary of actions taken or show how this has been covered
<p>With respect to the points raised above:</p> <ol style="list-style-type: none">1. We would only usually assess impacts on sensitive receptors within 400m from the installation boundary, for which there are none for this installation. The results of the odour impact assessment in the planning application support our conclusion that it is unlikely that odour will be considered a nuisance beyond the installation boundary. (Please note the odour impact assessment was carried out for 200,000 broilers and not the 212,000 applied for in the EPR application, however this is unlikely to affect the overall conclusion).2. As for odour, we would only usually assess impacts of noise on sensitive receptors within 400m of the installation boundary. As above, the results of the noise impact assessment support our conclusion that it is unlikely that

noise will be considered a nuisance beyond the installation boundary.

3. Security lighting has not been considered in the determination of this application.

4. We have not included conditions preventing the storage of manure on site. The application states that litter is removed from site at poultry house clean out, therefore the permit has been determined on the basis that no manure is stored on site. The operator would need to apply to vary the permit if manure storage was required.

5. We have completed an assessment of the biomass boiler (see key issues section 'Biomass boiler') and it is considered not likely to pose a significant risk to the environment or human health.

The submission of the case log history confirms there have been no recent nuisance complaints within the vicinity of the installation.

No action required.

The Health and Safety Executive (HSE) was also consulted, however, no consultation response was received.

The application was also advertised on the www.gov.uk website, with a deadline of 25/11/15 for comments, but none were received.