

Environment Agency permitting decisions

Variation

We have decided to issue the variation for Brecks Farm Pig Unit operated by Brecks Farm Limited.

The permit number is EPR/VP3935UU.

The application number is EPR/VP3935UU/V002.

The application was duly made on 27/04/2015.

This was applied for as a normal variation in error and determined as a substantial variation.

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.

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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 – Industrial Emissions Directive (IED); Groundwater and soil monitoring; Ammonia emissions assessment; Odour; Biomass boilers; Installation boundary
- 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 and came into force on 27 February 2013. These Regulations transpose the requirements of the IED.

Amendments have been made to the conditions of this variation so that it now 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 Brecks Farm (dated 02/02/2015) 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.**

Ammonia emissions assessment

There are four Sites of Special Scientific Interest (SSSI) located within five kilometres of the installation. There are also five Local Wildlife Sites (LWSs), one Local Nature Reserve (LNR) and two Ancient Woodlands (AWs) within two kilometres 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 assessment alone and in combination is required; and
- an overlapping in combination assessment will be completed where existing farms are identified within five kilometres of the application.

SSSIs - < Y%

Screening using the Ammonia Screening Tool version 4.4 has indicated that the PC on Micklefield Quarry and Mickletown Ings for ammonia, acid and nitrogen deposition and the PC for Roach Lime Hills and Townclose Hills for acid deposition from the application site are under the 20% significance threshold and can be screened out as having no likely significant effect. See results below.

Table 1 – Ammonia emissions

Site	CLe ammonia µg/m ³	Predicted ammonia PC µg/m ³	PC % of CLe ammonia
Micklefield Quarry	1*	0.174	17.4
Mickletown Ings	3**	0.291	9.7

* A precautionary CLe of 1 µg/m³ has been assigned to this site. Where the precautionary level of 1 µg/m³ is used, and the PC is assessed to be < 20% insignificance threshold in this circumstance it is not necessary to further consider nitrogen deposition or acidification CLo values.

** CLe value taken from Air Pollution Information Site (APIS) website (www.apis.ac.uk) – 01/06/2015

Table 2 – Nitrogen deposition

Site	CLo nitrogen deposition kg/ha/yr***	Predicted PC nitrogen deposition kg/ha/yr	PC % of CLo nitrogen deposition
Mickletown Ings	N/A	1.513	N/A

*** CLo value taken from Air Pollution Information Site (APIS) website (www.apis.ac.uk) – 01/06/2015

Table 3 – Acid deposition

Site	CLo acid deposition Keq/ha/yr ***	Predicted PC acid deposition (N) in Keq/ha/yr	PC% of CLo acid deposition
Mickletown Ings	N/A	0.108	N/A
Roach Lime Hills	5.071	0.273	5.4
Townclose Hills	5.071	0.585	11.5

*** CLo value taken from Air Pollution Information Site (APIS) website (www.apis.ac.uk) – 01/06/2015

No further assessment required for Micklefield Quarry and Mickletown Ings.

SSSIs – sites between Y% and Z% but no other farms acting in combination

Screening using AST v4.4 has determined that the PC on Roach Lime Hills SSSI for ammonia and nitrogen deposition from the application site are over the 20% significance threshold. Detailed modelling (reference: A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Proposed Piggery at Brecks Farm – 17th November 2014) has determined that the PC on Townclose Hills SSSI for ammonia and nitrogen deposition from the application site are over the 20% significance threshold. As such, it is not possible to conclude no likely significant effect alone. Where the PC falls between 20% and 50%, Environment Agency guidance indicates that an in combination assessment should be undertaken.

A search of all existing active intensive agriculture installations permitted by the Environment Agency has identified that there are no other farms, within five kilometres, acting in combination with this application. The PC is predicted to be < 50% CLe and CLo significance threshold. It is possible to conclude no significant effect to the site from the installation, no further assessment should be undertaken. See results below.

Detailed modelling provided by the applicant has been audited in detail by our Air Quality Modelling and Assessment Unit (AQMAU) and we have confidence that we can agree with the report conclusions.

Table 4 – Ammonia emissions

Site	CLe ammonia µg/m ³	Predicted ammonia PC µg/m ³	PC % of CLe ammonia
Roach Lime Hills	3**	0.735	24.5
Townclose Hills	3**	0.62	20.7

** CLe value taken from Air Pollution Information Site (APIS) website (www.apis.ac.uk) – 01/06/2015

Table 5 – Nitrogen deposition

Site	CLo nitrogen deposition kg/ha/yr***	Predicted PC nitrogen deposition kg/ha/yr	PC % of CLo nitrogen deposition
Roach Lime Hills	15	3.816	25.4
Townclose Hills	15	4.8	32.2

*** CLo value taken from Air Pollution Information Site (APIS) website (www.apis.ac.uk) – 01/06/2015

No further assessment is required for Roach Lime Hills and Townclose Hills SSSIs.

Ammonia assessment – Other nature conservation sites

The following trigger thresholds have been applied for the assessment of Local Wildlife Sites (LWS), Ancient Woodlands (AW) and Local Nature Reserves (LNRs):

- if the process contribution (PC) is below 100% of the relevant critical level (CLe) or critical load (CLo) using the Ammonia Screening Tool version 4.4; and
- if further modelling shows the PC is < 100% then the farm can be permitted.

Other nature conservation sites – sites that screen out from pre application screen

For the following sites this farm has been screened out using AST v4.4. The PC on the LWSs, AWs and LNR for ammonia, acid and nitrogen deposition from the application site are under the 100% significance threshold and can be screened out as having no likely significant effect.

Table 6 – Ammonia emissions

Site	CLe ammonia µg/m ³	Predicted ammonia PC µg/m ³	PC % of CLe ammonia
Preston Hills, Garforth LWS	3**	1.347	44.9
Preston Hill LWS	3**	1.416	47.2
Kennet Lane Meadow LWS	3**	0.878	29.3
Avenue Wood LWS	1*	0.690	69.0
Unnamed	3**	1.066	35.5

woodland AW			
Preston Holks AW	3**	1.419	47.3
Townclose Hills LNR	3**	1.547	51.6

* A precautionary CLe of 1 µg/m³ has been assigned to this site. Where the precautionary level of 1 µg/m³ is used, and the PC is assessed to be < 20% insignificance threshold in this circumstance it is not necessary to further consider nitrogen deposition or acidification CLo values.

** CLe value taken from Air Pollution Information Site (APIS) website (www.apis.ac.uk) – 01/06/2015

Table 7 – Nitrogen deposition

Site	CLo nitrogen deposition kg/ha/yr***	Predicted PC nitrogen deposition kg/ha/yr	PC % of CLo nitrogen deposition
Preston Hills, Garforth LWS	15	6.995	46.6
Preston Hill LWS	10	7.354	73.5
Kennet Lane Meadow LWS	20	4.562	22.8
Unnamed woodland AW	10	5.537	55.4
Preston Holks AW	10	7.371	73.7
Townclose Hills LNR	10	8.037	80.4

*** CLo value taken from Air Pollution Information Site (APIS) website (www.apis.ac.uk) – 01/06/2015

Table 8 – Acid deposition

Site	CLo acid deposition Keq/ha/yr ***	Predicted PC acid deposition (N) in Keq/ha/yr	PC% of CLo acid deposition
Preston Hills, Garforth LWS	2.91	0.500	17.2
Preston Hill LWS	2.91	0.525	18.0
Kennet Lane Meadow LWS	4.69	0.356	7.6
Unnamed woodland AW	2.89	0.395	13.7
Preston Holks AW	2.91	0.527	18.1

Townclose Hills LNR	4.69	0.574	12.2
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*** CLo value taken from Air Pollution Information Site (APIS) website (www.apis.ac.uk) – 01/06/2015

No further assessment of these sites are required.

Garforth Disused Railway LWS

The applicant provided detailed modelling (reference: A Report on the Modelling of the Dispersion and Deposition of Ammonia from the Proposed Piggery at Brecks Farm – 17th November 2014) which illustrates the predicted process contribution impacts on Garforth Disused Railway LWS. However, the West Yorkshire Council Ecology Team confirmed that '*nothing to indicate LWS value*' has been recorded at the site. Therefore, the LWS was not considered in the determination of the variation.

Odour

Odour emissions, resulting predominantly from the slurry management, have been a concern for members of the public and Local Authority Environmental Health department. The Environment Agency's approach to regulating odour emissions and the odour history of this installation are addressed in Annex 2 of this document.

Biomass boiler

The applicant is varying their permit to include one biomass boiler with a net rated thermal input of 195 kilowatts.

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 pig farms 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 metres above ground), and there are:
 - adjacent buildings, the stack height must be a minimum of 3 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 A above, and are therefore considered not likely to pose a significant risk to the environment or human health and no further assessment is required.

Installation Boundary

This variation authorises new land to be added to the permit to accommodate the three new pig houses. The site condition report (SCR) has been updated to incorporate the previously unpermitted land. The SCR confirms that there have been no previous pollution incidents recorded on the new land.

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 Regulatory Guidance Notes (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 Environmental Permitting Regulations (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 permit implements the requirements of the EU Directive on Industrial Emissions. See key issues 'Industrial Emissions Directive (IED)' section above for further information.	✓
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 updated the Site Condition Report to provide a description of the condition of the new area of land to be included in the permit. We consider this description is satisfactory. The decision	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	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	<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 has been carried out as part of the permitting process. We consider that the application will not affect the features of the site.</p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p> <p>See key issues ‘Ammonia emissions assessment’ section above for more information.</p>	✓
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, 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; • Chemical storage is within a purpose built store on site that is fully bunded; • All fuels are stored in bunded fuel stores; • Grain and other ingredients are stored within an enclosed building, where the milling and mixing activity also takes place. The mill is fitted with a cyclone and dust filters and there are maintained in accordance with manufactures instructions to ensure that dust emissions to air are minimised; • The incinerator plant is approved by the local Animal Health and Veterinary Laboratories Agency 	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>(AHVLA), under the Animal by-Products Regulations (ABPR);</p> <ul style="list-style-type: none"> The biomass boiler fuel is derived from virgin fuel (straw). <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in the Sector Guidance Note (SGN) EPR 6.09 '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.</p>	
The permit conditions		
Updating permit conditions during consolidation.	<p>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).</p> <p>The operator has agreed that the new conditions are acceptable.</p>	✓
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), miscanthus or straw shall be used as a fuel for the biomass boiler. These materials are never to be mixed with, or replaced by, waste.</p>	✓
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 RGN 5 on Operator Competence.</p>	✓

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.

Local Authority Environmental Health – Leeds City Council

Response received on 27/05/2015
Environmental Health – Leeds City Council
Brief summary of issues raised
<p>The response indicated that the local authority Environmental Health Officer had concerns over the following:</p> <p><u>Odour</u></p> <ul style="list-style-type: none">• Concerns over a significant number of odour complaints in the past – largely relating to slurry spreading.• The odour management plan (OMP) does not reflect the extent/cause of the odour complaints. <p><u>Manure management</u></p> <ul style="list-style-type: none">• Recommended that a manure management plan takes into consideration the DEFRA Code of Agricultural Practice for farmers.• Covering of the slurry lagoon should be considered.• Increase of the slurry lagoon as a result of the increase in pig numbers. <p><u>Detailed ammonia modelling</u></p> <ul style="list-style-type: none">• Highlighted that the detailed ammonia modelling, provided in support of the application, shows there to be '<i>exceedances of acceptable levels are expected</i>' at Garforth Disused Railway Local Wildlife Site (LWS).
Summary of actions taken or show how this has been covered
<p><u>Odour</u></p> <p>Area confirmed that virtually all of the complaints relate to slurry spreading. They have seen a reduction in the number of complaints over the past three years from 73 in 2012/13, 54 in 2013/14 to 37 for 2014/15 – of the 37, 23 related specifically to slurry spreading activities. Slurry spreading is outside of the remit for National Permitting Service.</p> <p>As part of this variation the Operator has made significant improvements to the site such as floating cover over the slurry lagoon, installing high velocity roof ventilation, improving the efficiency of spreading and slurry separators.</p> <p>In addition the permit contains the following conditions designed to enable odour to be controlled;</p> <p><i>3.2.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to</i></p>

minimise the odour.

3.2.2. The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;*
- (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.*

The operator has an Odour Management Plan (OMP) relating to this site which outlines their approach to dealing with odour . The Environment Agency have reviewed and agree with the scope and suitability of key measures. However, this should not be taken as confirmation that the details of equipment specification design, operation and maintenance are suitable and sufficient. That remains the responsibility of the operator.

The Operator is required to operate the site in accordance with their OMP, and is committed to periodically reviewing this OMP to ensure its continued suitability for this installation. Should there be any odour complaints relating to on site activities the OMP may be reviewed and amended as required.

Manure management

Area confirmed that the Operator has a manure management plan in place and that it reflects the DEFRA Code of Good Agricultural Practice.

The Operator has confirmed that they have a Manure Management Plan in place and this is tied into the permit through the following condition:

2.3.6 The operator shall:

- (a) maintain and implement a manure management plan;*
- (b) review and record at least every four years whether changes to the plan should be made; and*
- (c) make any appropriate changes to the plan identified by the review.*

The Operator has installed a floating roof cover as part of this variation.

Detailed ammonia modelling

Leeds City Council County Ecologist confirmed there is '*nothing to indicate LWS value*' at Garforth Disused Railway LWS. Therefore, the LWS was not considered in the determination of the variation.

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

This proposal was also publicised on the Environment Agency's website between 07/05/2015 and 08/06/2015, but no representations were received during this period.