

# Environment Agency permitting decisions

## Variation

We have decided to issue the variation for Boiling Wells Farm operated by Greylees Limited.

The permit number is [EPR/JP3131MT](#)

The variation number is [EPR/JP3131MT/V002](#).

This was applied for and determined as a substantial variation.

The application was duly made on 30 July 2015.

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: Industrial Emissions Directive, Groundwater and Soil Monitoring, Biomass Boiler, Ammonia Emissions
- Annex 1 the decision checklist
- Annex 2 the consultation and web publicising responses

## Example Key Issues

### 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 Boiling Wells Farm (dated May 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.**

## Biomass boiler

This variation includes a change to the permit to include Grade A recycled waste wood as a source of fuel for a biomass boiler with a net rated thermal input of 995 kilowatts.

We are satisfied that the operator will not burn waste wood originating from their own installation. All Grade A recycled waste wood being burnt in the biomass boiler will come from a third party as EWC code 03 01 05 – sawdust, shavings, cuttings, wood, particle board and veneer. We have specified the permitted waste code in table S2.2 of the permit. The operator is only permitted to accept this waste code for biomass fuel.

Grade A clean recycled wood means visibly 'clean' recycled waste wood mainly originating from packaging waste, pallets, packing cases and process off-cuts from the manufacture of untreated wood products. As defined in BSI PAS 111: 2012.

We are satisfied that the waste wood is from a manufacturing source and that it will not be contaminated.

Due to the fuel source and the capacity of the unit, the biomass boiler are included in the permit as a Part B activity listed in Schedule 1 of the Environmental Permitting Regulations as follows:

- **Section 5.1 B(a)(v)** incineration in a small waste incineration plant with an aggregate capacity of 50 kilogrammes or more per hour of wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coatings.

The biomass boiler is permitted to burn biomass chips or pellets comprising virgin timber, straw, miscanthus, grade A waste biomass; or a combination of these.

## **Ammonia emissions**

There are no European sites within 10km of the installation. There is one Site of Special Scientific Interest (SSSI) located within 5 km of the installation. There are also 10 Local Wildlife Sites (LWS) 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 (CL<sub>e</sub>) or critical load (CL<sub>o</sub>) 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 v4.4 has indicated that emissions from Boiling Wells Farm will only have a potential impact on SSSI site with a precautionary critical level of 1µg/m<sup>3</sup> if they are within 714 metres of the emission source.

Initial screening indicates that beyond 714 m the PC is less than 0.2µg/m<sup>3</sup> (i.e. less than 20% of the precautionary 1µg/m<sup>3</sup> critical level) and therefore beyond this distance the PC is insignificant. Wilsford and Rauceby Warrens SSSI 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)
Wilsford and Rauceby Warrens	1,752

### **Ammonia assessment - LWS**

There are 10 Local Wildlife Sites (LWS) within 2 km of Boiling Wells 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 (version 4.4) has indicated that emissions from Boiling Wells 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 250 metres 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 LWS are beyond this distance.

**Table 2 – distance from source**

Site	Distance (m)
Bullywells Quarry LWS	376
Manor House Paddock LWS	1,439
Rauceby Park, Thorpe Drove Verges LWS	1,908
Windmill Plantation LWS	1,734
Rauceby Warren Road Verge LWS	1,737
Rauceby Warren LWS	1,732
Sleaford Drove Meadows LWS	1,745
Sleaford Fen LWS	1,078
Sleaford Meadows LWS	1,837
South Rauceby, Thorpe Drove Verges LWS	1,908

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.

## **Odour modelling**

The operator's odour modelling report dated 25 June 2014 submitted with this application was based upon poultry numbers of 78,000 rather than the 90,000 applied for. The results from the report indicate that there will be no significant impact, however this result cannot be used to show what the expected impact will be in relation to an application for 90,000 birds. The odour impact based upon an application for 90,000 has been reviewed by our Air Quality Modelling and Assessment Unit (AQMAU) and their results are as follows:

Although incorrect bird numbers were used, we can proportionally scale up the predicted impact and remodelling would not provide any additional insight. As the maximum predicted concentrations are low ( $<1.5 \text{ ou}_E/\text{m}^3$ ) and the nearest receptor is more than 300 m away, the risk of odour pollution can be considered low.

## 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
<b>Consultation</b>		
Scope of consultation	The consultation requirements were identified and implemented. The decision was taken in accordance with Regulatory Guidance Note (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.	✓
<b>Operator</b>		
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.	✓
<b>European Directives</b>		
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.  <b>See key issues 'Industrial Emissions Directive' section above for further information.</b>	✓
<b>The site</b>		
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.	✓

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>	✓
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><b>See key issues ‘Ammonia Emissions Assessment’ section above for further information.</b></p> <p>We have not formally consulted on the application. The decision was taken in accordance with our guidance.</p>	✓
<b>Environmental Risk Assessment and operating techniques</b>		
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"> <li>• dirty water storage facilities are in place on site;</li> <li>• nipple drinkers are used to reduce wastage of water and maintain dry litter;</li> </ul>	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<ul style="list-style-type: none"> <li>• Chemical storage is within a locked facility;</li> <li>• all fuels are stored in bunded fuel stores;</li> <li>• emergency generator on site in case of power failure;</li> <li>• carcasses stored in sealed bins before being sent for rendering by an approved contractor;</li> <li>• the fuel is derived from Grade A waste wood; and</li> <li>• the biomass boiler appliance and it's installation meets the technical criteria to be eligible for the Renewable Heat Incentive.</li> <li>• the stacks are 1m or more higher than the apex of the adjacent buildings.</li> </ul> <p>The proposed techniques for priorities for control are in line with the benchmark levels contained in the Sector Guidance Note EPR6.09 and we consider them to represent appropriate techniques for the facility. The permit conditions ensure compliance with relevant BREFs.</p> <p>See key issues relating to biomass boiler fuel specification. We are satisfied that Grade A waste wood can be used as a fuel source for the biomass boilers and have incorporated the relevant operating techniques into table S1.2.</p>	
<b>The permit conditions</b>		
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.</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 chops and pellets), straw, miscanthus, grade A waste biomass; or a combination of these.</p>	✓
Waste types	We have specified the permitted waste type and	✓



Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>description which can be accepted at the regulated facility.</p> <p>We are satisfied that the operator can accept this waste. See key issues relating to biomass boilers.</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>	✓
<b>Operator Competence</b>		
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.

### **1) Local Authority Environmental Health**

a) acknowledgement

Response received on 15 July 2015 from
Environmental Health - North Kesteven District Council
Brief summary of issues raised
The response indicated that the local authority Environmental Health Officer has no concerns regarding the risk to the health of the local population from this installation.
Summary of actions taken or show how this has been covered
None required.

### **2) Responses not received**

The Health and Safety Executive (HSE) was also consulted; however, a consultation response was not received.

### **3) Web publicising**

This proposal was also publicised on the Environment Agency's website between 05 August 2015 and 03 September 2015, but no representations were received during this period.