# Review of an Environmental Permit under the Environmental Permitting (England & Wales) Regulations 2010 ("EPR")

# Decision document recording our decision-making process

We have decided to vary the Permit for Brookfields Anaerobic Digestion Plant operated by Lower Reule Bioenergy Limited, as a result of an application made by the Operator.

The Permit number is EPR/FP3093VJ

The Variation notice number is EPR/FP3093VJ/V003

#### What this document is about

This is a decision document, which accompanies a variation notice.

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.

# Preliminary information and use of terms

We refer to the Permit (both existing and as varied) as "the **Permit**" in this document; and to the variation of the Permit as "the **Variation**".

The Operator of the Installation is Lower Reule Bioenergy Limited: we call Lower Reule Bioenergy Limited "the **Operator**" in this document. We refer to Lower Reule Bioenergy Limited's Brookfields Anaerobic Digestion Plant as "the **Installation**".

The Application was duly made on 20 October 2014.

#### How this document is structured

- Our decision
- The legal framework
- How we took our decision
- Key issues in the determination
- Annex 1 the decision checklist

#### 1 Our decision

We have issued a Variation, which will allow the Operator to operate their facility as an Installation, subject to the conditions in the varied Permit.

This Variation does several different things:

- First, it gives effect to our decisions following the identification of the Operator as undertaking a "newly prescribed activity" (NPA) under the Industrial Emissions Directive (IED);
- Second, it takes the opportunity to bring earlier variations into an up-todate, consolidated Permit. The consolidated Permit should be easier to understand and use; and
- Third, it modernises the entire Permit to reflect our current template. The
  template reflects our modern regulatory permitting philosophy and was
  introduced because of a change in the governing legislation. This took
  place when the Pollution Prevention and Control (England and Wales)
  Regulations 2000 ("PPC") were replaced in 2008 by a new statutory
  regime under the Environmental Permitting Regulations 2007 (now the
  2010 version).

The introduction of new template conditions makes the Permit consistent with our current general approach and philosophy. Although the wording of some conditions has changed, while others have disappeared because of the new regulatory approach, it does not affect the level of environmental protection achieved by the Permit in any way.

We consider that, in reaching our decision, we have taken into account all relevant considerations and legal requirements and that the Permit will continue to ensure that a high level of protection is provided for the environment and human health.

The original Permit, issued on 26/02/10, ensured that the facility, would be operated in a manner which would ensure the protection of the environment specified in the existing Guidance at the time. To the extent that we have substantively altered the Permit as a result of this variation, the new

requirements will deliver a higher level of protection to that which was previously achieved.

As we explained above, we do not address changes to the Permit in this document, to the extent that they give effect to either the consolidation of earlier variations, or introduce new template conditions.

### 2 The legal framework

The original Permit was granted on 26/02/10 under the Environmental Protection Act 1990 and regulated under the Waste Management Licensing Regulations 2007 (now 2010).

The Installation will be subject to the requirements of the Industrial Emissions Directive (IED) 2010/75/EU and regulated under the Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No 675). The IED was transposed in England and Wales by the Environmental Permitting (England and Wales)(Amendment) Regulations 2013 on 27 February 2013.

The IED seeks to achieve a high level of protection for the environment taken as a whole from harmful effects of industrial activities. It does so by requiring each of the industrial installations to have a permit from the competent authority (in England, the Environment Agency, or for smaller Installations, the relevant Local Authority). The IED has increased the number of activities that require an Installations permit. These are predominantly regulated as "waste operations" and include (when exceeding specific thresholds described in IED):

- hazardous waste treatment for recovery;
- hazardous waste storage;
- biowaste treatment recovery and/or disposal;
- treatment of slags and ashes
- metals shredding;
- pre-treatment of waste for incineration/co-incineration;
- biological production of chemicals; and
- independently operated wastewater treatment works serving only industrial activities subject to the Directive

Article 11 of the IED requires the relevant authority (the Environment Agency in this case) to ensure that the Installation is operated in such a way that all the appropriate preventative measures are taken against pollution, in particular through the application of Best Available Techniques (BAT). Under Article 15(2), the Permit must contain emission limit values (ELVs) (or equivalent parameters or technical measures) for any pollutants likely to be emitted from the Installation in significant quantities. These ELVs are to be based on BAT, but also on local factors and EU Environmental Quality Standards. The overarching requirement is to ensure a high level of protection for the environment and human health.

We are required by Article 13 of the IED to keep abreast of developments in BAT. In addition, Article 13 requires us to carry out a periodic review of the permit's conditions, and to update them if necessary.

The IED also requires the European Commission to organise an exchange of information between EU Member States so that what are known as BAT reference documents (or BREF notes) can be published, creating a level playing field across the EU, providing a consistent set of standards for new plant, to which regulatory authorities in the Member States can then have reference. These BREF notes are the basis for our own national sector technical guidance. The Commission is also required to update BREF notes on a regular basis. The waste treatment BREF notes are currently being reviewed and a final issue date is anticipated in 2016. Under the IED, all permits will be subject to review within four years of the publication of revised BREF notes. This means that we will need to do a further review against any new standards in the BREF notes at sometime in the future.

The IED is to be implemented over several years commencing from 7 January 2013. For existing installations operating "newly prescribed activities", the relevant date for implementation is 7 July 2015.

#### 3 How we reached our decision

It is the Operators responsibility to ensure they are correctly regulated for the activities they are carrying out. Following adoption of the IED, the Environment Agency has engaged in a range of briefings and communications with the waste industry sector to raise awareness of the implications of the Directive and the need to ensure their facilities are correctly regulated (particularly after the implementation date of 7 July 2015 for newly prescribed activities).

Early in 2014, the Environment Agency provided further briefings to industry trade bodies and wrote to operators we believed may be implicated by these changes. We provided detailed information sheets that described the implications and the process operators should follow if they decided to have their activities permitted as Installations.

We confirmed that most facilities fell into one of two groups:

#### • Facilities permitted from April 2007

When these facilities were permitted, a thorough assessment would have been carried out to confirm whether the proposed activities were using "appropriate measures" as a standard to protect the environment.

This standard of protection is the same standards that would have been assessed against had the facilities applied as an Installation activity (i.e. BAT). The permit would have also been issued with modern conditions that ensured protection of the environment.

We consider that these facilities are effectively 'IED-compliant' in terms of the technical standard of the facility with the exception of the "newly prescribed activity". For these facilities, we consider that, in general, no further technical assessment is required, so administrative variations are an appropriate mechanism to show the activities as Installation activities. The administrative variation is a necessary route for the Operator to formally ask for this activity to be included in their permit and for us to advertise that request on our Public Register.

It is understood that the Environment Agency granted permits for new waste activities under the Waste Management Licensing Regulations 1994 beyond April 2007. Where a facility falls into this group, the Environment Agency shall determine whether or not the application was assessed using "appropriate measures". Where it is determined that the application was assessed using "appropriate measures", the application will be designated as an "administrative variation".

#### Facilities permitted before April 2007

For these facilities, a "normal" or "substantial" variation is appropriate because a detailed technical assessment is required on aspects of the Application in addition to the administrative changes.

Substantial variations will only be relevant where the newly prescribed activity is being added to an existing installation permit.

#### This Variation

The original Permit was granted on 26/02/10 and subsequently varied on 05/05/10. We have reviewed the documentation submitted in support of the original permit and subsequent variation application(s) in this determination. We are not satisfied that the standard of protection was assessed using appropriate measures. We have determined this Application as a normal variation. As the Variation will not have any negative effects on the environment, it is not a substantial variation and so does not require consulting on.

## 4 Key issues in the determination

This variation implements the changes brought about by the IED for "existing facilities operating newly prescribed activities" and completes the transition of this facility from a waste operation to an IED Installation.

The operator provided a risk assessment and BAT assessment for the operation of the Brookfields Anaerobic Digestion Plant as part of a supporting statement and associated appendices.

This included an assessment of operations against the following Technical Guidance Notes:

- IPPC S5.06 Guidance for the Treatment of Hazardous and Non-Hazardous Waste;
- H3 Noise assessment and control:
- H4 Odour Management

We are satisfied with the BAT assessment provided by the operator which adequately addresses the following points:

- pre-acceptance of waste
- acceptance of waste
- storage and handling of waste
- process (treatment) description
- fugitive emissions to air
- fugitive emissions to surface and groundwater (secondary containment, site drainage plan)
- odour management
- monitoring
- accidents

# • Annex 1 – decision checklist

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

Aspect considered	Justification / Detail	Criteria met Yes
Consultation		100
Responses to web publicising	No public responses were received in response to the web publicising of the application.	✓
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.	<b>✓</b>
The facility		
The regulated facility	The extent/nature of the facilities taking place at the site required clarification.	<b>✓</b>
	The regulated facility is an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations and the following directly associated activities:	
	Listed activity:	
	S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non hazardous waste with a capacity exceeding 75 tonnes per day involving biological treatment (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment.      Directly associated activities:	
	Directly associated activities.	
	Storage of waste pending recovery or disposal	
	Physical treatment for the purpose of recycling	
	Steam and electrical power supply	
	Emergency flare operation	
	Raw material storage	
	Gas storage	
	Digestate storage	
	Process water collection and storage	

Aspect	Justification / Detail	Criteria
considered		met
	Surface water collection and storage	Yes
	There are no remaining waste activities forming part of this	
	facility	
European Direc		
Applicable Directives	All applicable European Directives have been considered in the determination of the application.	<b>✓</b>
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.	<b>✓</b>
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. These include:  Allimore Green Common, Site of Special Scientific Interest (Reference: 1002212) – distance from site = 1929m  Midland Meres and Mosses, Phase 2 Ramsar – distance from site = 4887m Relevant features of interest: 1.2 Bogs & wet habitats (sensitive to acidification) (Active raised bogs (Priority Feature))  Mottey Meadows Special Area of Conservation – distance from site = 5745m Relevant features of interest: 1.1 Fens & wet habitats (not sensitive to acidification) (Lowland hay meadows)  A full assessment of the application and its potential to affect the sites and habitats has been carried out as part of the permitting process. We consider that the application will not affect the features of the sites or habitats.	
	We have not formally consulted on the application. The	

Aspect	Justification / Detail	Criteria
considered		met
	decision was taken in accordance with our guidance.	Yes
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 [or similar methodology supplied by the operator and reviewed by ourselves], all emissions may be categorised as environmentally insignificant.	<b>√</b>
Operating techniques	We have reviewed the techniques used by the operator and compared these with the relevant guidance notes –  • IPPC S5.06 – Guidance for the Treatment of Hazardous and Non-Hazardous Waste; • H3 – Noise assessment and control; • H4 – Odour Management  The proposed techniques/emission levels for priorities for control are in line with the benchmark levels contained in the above technical guidance notes and we consider them to represent appropriate techniques for the facility. We are satisfied with the BAT assessment provided by the operator which adequately addresses the following points:  • pre-acceptance of waste • acceptance of waste • storage and handling of waste • process (treatment) description • fugitive emissions to air • fugitive emissions to surface and groundwater (secondary containment, site drainage plan) • odour management • point source emissions to air, water or land (where relevant) • monitoring • accidents	
The permit con	ditions	
Updating permit conditions during	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.	✓

Aspect	Justification / Detail	Criteria
considered		met
consolidation		Yes
Raw materials	We have not specified limits and controls on the use of raw materials and fuels.	<b>✓</b>
Waste types	We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility. We are satisfied that the operator can accept these wastes because they have the necessary infrastructure, operating systems and technical capability to manage these wastes in an appropriate manner.  The wastes types can be treated via anaerobic digestion as they are included in the revised Anaerobic Digestate Quality Protocol (ADQP)  We made these decisions with respect to waste types in accordance with our Technical Guidance Note – Framework for assessing suitability of wastes going to anaerobic digestion, composting and biological treatment.	•
Incorporating the application	We have specified that the operator 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.	<b>✓</b>
Emission limits	We have decided that emission limits should be set for the parameters listed in the permit.  The following substances (Nitrogen oxides, Sulphur dioxide, Carbon monoxide, Total Volatile Organic Compounds) have been identified as being emitted in significant quantities and ELVs and/or equivalent parameters or technical measures based on BAT have been set for these substances and others.	<b>✓</b>
Monitoring	We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified.  These monitoring requirements have been imposed in order to demonstrate compliance with the conditions of the permit for operations requiring the management of air emissions. We made these decisions in accordance with LFTGN 08: Guidance for monitoring landfill gas engine	<b>✓</b>

Aspect	Justification / Detail	Criteria
considered		met
		Yes
	emissions and Guidance for monitoring enclosed landfill gas flares (LFTGN 05) which are considered the most appropriate TGN for this activity.	
	Based on the information in the application we are satisfied that the operator's techniques, personnel and equipment have either MCERTS certification or MCERTS accreditation as appropriate.	
Reporting	We have specified reporting in the permit.	✓
	We have specified reporting in the permit. As the monitoring of point source emissions to air is only required annually, reporting is also required annually. Reporting forms have been prepared to facilitate reporting of data in a consistent format. These reporting requirements are deemed sufficient and proportional for the Installation. We made these decisions in accordance with our guidance <i>How to Comply with your Environmental Permit</i> .	
Operator Comp	petence	
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.	<b>✓</b>
Technical	Technical competency is required for activities permitted.	✓
competence	The operator is a member of an agreed scheme.	
Relevant Convictions	The National Enforcement Database 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 RGN 5 on Operator Competence.	<b>√</b>