

# Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Riverside AD Limited

Riverside AD Facility 43 Willow Lane Willow Lane Industrial Estate Mitcham Surrey CR4 4NA

Permit number

EPR/AB3307LK

### Riverside AD Facility Permit number EPR/AB3307LK

### Introductory note

#### This introductory note does not form a part of the permit

The main features of the permit are as follows:

The facility is located within the Willow Lane Industrial Estate in Mitcham, Surrey at grid reference TQ 27569 67516. The facility is bound to the north by an open woodland; to the south by a public open space; to the east by industrial units; to the west by River Wandle. This is a multi-operator site, with site infrastructure shared with an adjacent in-vessel aerobic treatment facility operated by Riverside Bio Limited.

The facility is designed to process up to 36,000 tonnes per annum of pre-processed waste arising from the adjacent in-vessel aerobic treatment facility via anaerobic digestion (AD). The facility will comprise the following operations:

- Anaerobic digester tank (4,000 tonnes)
- Combustion plant consisting of one combined heat and power (CHP) engine and an emergency flare

Pre-processed waste (which has undergone pasteurisation) from the adjacent in-vessel aerobic treatment facility will be delivered to the digester via a series of steel pipes. Waste will undergo digestion at 35°C for up to 60 days. Biogas drawn from the digester will be used to generate electricity from a CHP engine (1.2 MWth).

The by-product from the AD process (whole digestate) will be pumped via a series of steel pipes to a holding tank at Riverside Bio Limited for despatch off-site using vehicle tankers. This environmental permit does not authorise the spreading of digestate on land or the upgrading of biogas to biomethane.

Main releases to the environment are to air via the combustion of biogas in the CHP engine. Biogas will be burnt in the emergency flare in the event of breakdown and/or maintenance of the CHP engine. Uncontaminated site surface water is discharged via two emission points. The control of the emission points to surface water is under the control of Riverside Bio Limited.

There are two non-statutory sites (Bennett's Hole and the Upper River Wandle) within 200 metres of the facility. Assessment by the Environment Agency shows that emissions from the activities undertaken at the facility are unlikely to have a significant impact on the habitat sites.

The status log of the permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit				
Description	Date	Comments		
Application EPR/AB3307LK	Duly made 08/10/13	Application for an anaerobic digestion facility with combustion of biogas.		
Additional information received	31/03/14	Response to Schedule 5 notice on several aspects of the application.		
Additional information received	07/07/14	Confirmation from the applicant in relation to noise impact		
Additional information received	09/07/14	Confirmation from Applicant in relation to the upgrading of biogas to biomethane activity		

Status log of the permit		
Additional information received	16/07/14	Confirmation from Applicant in relation to monitoring levels of digestate within the digestion tank
Additional information received	21/08/14	Proposals from the Applicant regarding the upgrading of biogas to biomethane activity
Additional information received	26/08/14	Updated site plan showing the shared responsibility
Additional information received	22/10/14	Confirmation from the applicant in relation to the acceptance of "zero contamination".
Permit determined	DD/MM/YY	Permit issued to Riverside AD Limited.

End of introductory note

### Permit

### The Environmental Permitting (England and Wales) Regulations 2010

#### Permit number

EPR/AB3307LK

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010

Riverside AD Limited ("the operator"),

whose registered office is

C/o 17 Throwley Way 17 Throwley Way Sutton Surrey SM1 4AF

company registration number 08371925

to operate waste operations at

Riverside AD Facility 43 Willow Lane Willow Lane Industrial Estate Mitcham Surrey CR4 4NA

to the extent authorised by and subject to the conditions of this permit.

Name	Date	
[name of authorised person]	[DD/MM/YYYY]	

Authorised on behalf of the Environment Agency

# Conditions

### 1 Management

#### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
  - (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme.

# 1.2 Avoidance, recovery and disposal of wastes produced by the activities

- 1.2.1 The operator shall take appropriate measures to ensure that:
  - (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
  - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
  - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.2.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

### 2 Operations

#### 2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

#### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

#### 2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Waste shall only be accepted if:
  - (a) it is of a type and quantity listed in schedule 2 table S2.1; and
  - (b) it conforms to the description in the documentation supplied by the producer and holder.

### 3 Emissions and monitoring

#### 3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.

#### 3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

#### 3.3 Odour

- 3.3.1 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 minimise the odour.
- 3.3.2 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.

#### 3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration 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 noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
  - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### 3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in tables S3.1 and S3.2;
  - (b) process monitoring specified in table S3.3
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 table S3.1 unless otherwise agreed in writing by the Environment Agency.

#### 3.6 Pests

- 3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.6.2 The operator shall:
  - (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;

(b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

### 4 Information

#### 4.1 Records

- 4.1.1 All records required to be made by this permit shall:
  - (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - (i) off-site environmental effects; and
    - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

#### 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 Within one month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
  - (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.2; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

#### 4.3 Notifications

- 4.3.1 The Environment Agency shall be notified without delay following the detection of:
  - (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;
  - (b) the breach of a limit specified in the permit; or
  - (c) any significant adverse environmental effects.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (c) any change in the operator's name or address; and
- (d) any steps taken with a view to the dissolution of the operator.

In any other case:

- (e) the death of any of the named operators (where the operator consists of more than one named individual);
- (f) any change in the operator's name(s) or address(es); and
- (g) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
  - (a) the Environment Agency shall be notified at least 14 days before making the change; and
  - (b) the notification shall contain a description of the proposed change in operation.

#### 4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

# Schedule 1 – Operations

Table S1.1	Activities	
Activity reference	Description of activities for waste operations	Limits of specified activity and waste types
A1: Anaerobic digestion facility	<ul> <li>R3: Recycling/reclamation of organic substances which are not used as solvents</li> <li>R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</li> </ul>	<ul> <li>Treatment operations shall be limited to:</li> <li>Biological treatment consisting of anaerobic digestion for the purpose of recovery (less than 100 tonnes per day including waste and non-waste solids and liquids)</li> <li>Treatment of animal waste shall not exceed 10 tonnes per day.</li> <li>All waste accepted for processing in the anaerobic digester shall have been pre-treated through the adjacent in-vessel aerobic treatment facility (operated by Riverside Bio Limited).</li> <li>The transfer of waste between the adjacent biological treatment facility and the anaerobic digester will be via steel pipeline.</li> </ul>
		<ul> <li>All pre- and post-treatment waste storage and loading of digestate shall be carried out in an enclosed building and on an impermeable surface with sealed drainage system.</li> <li>The biological treatment of wastes shall take place within a controlled reactor vessel.</li> <li>Use of pressure relief valves to protect the integrity of the plant. Such systems should not be used routinely to vent unburnt biogas.</li> </ul>
A2: Biogas combustion	R1: Use principally as a fuel or other means to generate electricity	Waste types as specified in schedule 1 table S2.1. The combustion of biogas for the purpose of generation of electricity and heat for use within the
	D10: Incineration on land	facility and export to the grid. Burning of biogas in a gas engine (1.2MWth)
		Use of an auxiliary flare required only for short periods of breakdown or maintenance of the facility only.
		Emissions of unburned biogas and the operation of the auxiliary flare shall be minimised. Any significant emissions of unburned biogas (including the operation of the pressure relief valves) and the operation of the auxiliary flare must be recorded.

Table S1.1 Activities				
Activity Description of activities for waste operations		Limits of specified activity and waste types		
		Biogas cleaning (prior to combustion) by biological or chemical scrubbing.		
		Biogas storage and drying prior to combustion.		
		Upgrading of biogas to bio-methane for injection to the Gas Grid is not permitted at this facility.		

Description	Parts	Date Received
Application EPR/AB3307LK/A001	Document reference CRM.1036.002.R.004 in response to section 3, Part B2 and sections 1, 3a and 3b, Part B4 of the application form	08/10/13
	Document reference CRM.1036.002.R.003 in response to section 7, Part B2 of the application form	
	Document reference CRM.1036.002.R.004 in response to section 6b, Part B2 of the application form	
	Appendix B – Process flow diagram; Drawings CRM.1036.002.D001 – D005; Drawing EDS-PR0104-003	
Additional information	Document reference CRM.1036.002.C.003.B – response to Schedule 5 notice regarding several aspects of the application (clarification of site baseline reference data, accident management plan, process monitoring plan, site surface system secondary containment, operational techniques, odour management plan, technical competence, process description, revised drawing showing site areas of responsibility – CRM.1036.002.D.006) excluding reference to proposed waste types.	31/03/14
Additional information	Email confirmation from applicant in relation to the upgrading of biogas	09/07/14
Additional information	Email confirmation from applicant in relation to monitoring levels of digestate within the digestion tank	16/07/14
Environment Agency Guidance Document	How to Comply with your Environmental Permit and any revised edition thereof	Version 6 – June 2013

# Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Permitte	d waste types and quantities for anaerobic digestion plant		
Maximum quantity	Annual throughput shall not exceed 36,000 tonnes.		
Exclusions	Only wastes which have been processed at the adjacent biological treatment facility (operated by Riverside Bio Limited) shall be accepted for processing at the AD facility. No other waste shall be received for processing at the AD facility. Wastes having any of the following characteristics shall not be accepted at the facility: • consisting solely or mainly of dusts, powders or loose fibres • hazardous wastes		
Waste code	Description		
19 02	wastes from physiochemical treatments of waste		
19 02 06	sludges from physico/chemical treatment other than those containing dangerous substances (biodegradable waste only)		
19 05	wastes from aerobic treatment of solid wastes		
19 05 99	Waste from the aerobic treatment of source-segregated biodegradable waste		

# Schedule 3 – Emissions and monitoring

Table S3.1 Poi	nt source em	issions to air – e	emission limit	s and monito	ring requireme	nts
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method [note 4]
AD – EP1 [Point AD – EP1 on site plan in Schedule 7]	CHP engine [note 1]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	500 mg/m <sup>3</sup>	Hourly average	Annual	BS EN 14792
		Sulphur dioxide	350 mg/m <sup>3</sup>			BS EN 14791
		Carbon monoxide	1400 mg/m <sup>3</sup>			BS EN 15058
		Total VOCs	1000 mg/m <sup>3</sup>			BS EN 12619:2013
AD – EP2 [Point AD – EP2 on site plan in Schedule 7]	Emergency flare [note 2]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	150 mg/m <sup>3</sup>	Hourly average	[note 3]	BS EN 14792
		Carbon monoxide	50 mg/m <sup>3</sup>			BS EN 15058
		Total VOCs	10 mg/m <sup>3</sup>			BS EN 12619:2013
V1 [Point PRV on site plan in schedule 7]	Digester pressure relief valve	Biogas	No limit set [note 5]			Weekly visual or remote monitoring to ensure valves are correctly seated
Note 1 – These limits are based on normal operating conditions and load, temperature 0°C (273K); pressure: 101.3 kPa and oxygen: 5 per cent (dry gas). The measurement uncertainty specified in LFTGN08 v2 2010 shall apply.						
Note 2 – These limits are based on normal operating conditions and load, temperature 0°C (273K); pressure: 101.3 kPa and oxygen: 3 per cent (dry gas). The measurement uncertainty specified in LFTGN05 v2 2010 shall apply.						
Note 3 – Monitoring to be undertaken 12 months after commissioning of the emergency flare. Following commissioning, monitoring to be undertaken in the event the emergency flare has been operational for more than 10 per cent of a year (876 hours).						
Note 4 – The monitoring standard or method shall be carried out as detailed in the Environment Agency Guidance M2 – <i>Monitoring of stack emissions to air</i> or as agreed in writing with the Environment Agency.						

Note 5 – Any release of biogas from the digester pressure relief valve (PRV) shall be notified to the Environment Agency in accordance with condition 4.3.1 and 4.3.2.

# Table S3.2 Point source emissions to water (other than sewer) and land – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
SW1 and SW2 [on site plan in schedule 7] emission to River Wandle via ditch system	Oil or Grease	Uncontaminated site surface water from non- process areas only.	No limit set	Instantaneous (spot sample)	Daily	Visible – no significant trace present



Table S3.3 Process mon	itoring requirements			
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Biogas from Digester tank	Flow	Continuous	In accordance with EU weights and Measures Regulations	In accordance with the Process Monitoring Plan
Biogas from Digester tank	Methane Hydrogen sulphide	Continuous		Gas monitors calibrated every 6 months to manufacturer's requirements
Digester tank	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary
Digester tank and Leak Detection System	Integrity checks	Weekly	Visual assessment	

# Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1.	AD – EP1, AD – EP2	Every 12 months	1 January
Process monitoring Parameters as required by condition 3.5.1.	Digester tank	Every 3 months	1 January

Table S4.2 Reporting forms				
Media/parameter	Reporting format	Date of form		
Air	Form air 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY		
Waste returns	E-Waste Returns Form	DD/MM/YY		

### Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

### Part A

Permit Number			
Name of operator			
Location of Facility			
Time and date of the detection			

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution

To be notified within 24 hours of	detection
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit			
To be notified within 24 hours of detection unless otherwise specified below			
Emission point reference/ source			
Parameter(s)			
Limit			
Measured value and uncertainty			
Date and time of monitoring			
Measures taken, or intended to be taken, to stop the emission			

Time periods for notification following detection of a breach of a limit			
Parameter	Notification period		

(c) Notification requirements for the detection of any significant adverse environmental effect				
To be notified within 24 hours of detection				
Description of where the effect on the environment was detected				
Substances(s) detected				
Concentrations of substances detected				
Date of monitoring/sampling				

# Part B – to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	
Name*	
Post	
Signature	

\* authorised to sign on behalf of the operator

Date

### Schedule 6 – Interpretation

"accident" means an accident that may result in pollution.

"anaerobic digestion" means a process of controlled decomposition of biodegradable materials under managed conditions where free oxygen is absent, at temperatures suitable for naturally occurring mesophilic or thermophilic anaerobes and facultative anaerobe bacteria species, which convert the inputs to a methane –rich biogas and whole digestate.

"animal waste" means any waste consisting of animal matter that has not been processed into food for human consumption.

"application" means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

"authorised officer" means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

"building" means a construction that has the objective of providing sheltering cover and minimising emissions of noise, particulate matter, odour and litter.

"D" means a disposal operation provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste. "emissions to land" includes emissions to groundwater.

"digestate" means material resulting from an anaerobic digestion process.

"emissions to land" includes emissions to groundwater.

"emissions of substances not controlled by emission limits" means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"Pests" means Birds, Vermin and Insects.

"quarter" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

"R" means a recovery operation provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"Waste code" means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

"Waste Framework Directive" or "WFD" means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

"year" means calendar year ending 31 December.

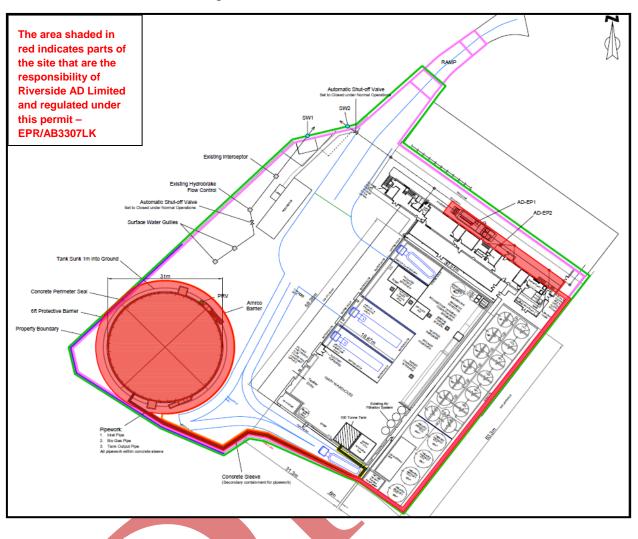
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or

in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

# Schedule 7 – Site plan



["©Crown Copyright. All rights reserved. Environment Agency, 100026380, 2014."]

END OF PERMIT

Permit Number:	EPR/AB3307LK	Operator:	<b>Riverside AD Limited</b>
Facility:	Riverside AD Facility	Form Number:	Air1 / DD/MM/YY

Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Uncertainty [4]
(NO ar expres Sulphu Carbor	Oxides of Nitrogen (NO and $NO_2$ expressed as $NO_2$ )	500 mg/m <sup>3</sup>	Hourly average		BS EN 14792		
	Sulphur dioxide	350 mg/m <sup>3</sup>			BS EN 14791		
	Carbon monoxide	1400 mg/m <sup>3</sup>			BS EN 15058		
	Total VOCs	1000 mg/m <sup>3</sup>			BS EN 12619:2013		
AD – EP2	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	150 mg/m <sup>3</sup>	Hourly average		BS EN 14792		
	Carbon monoxide	50 mg/m <sup>3</sup>			BS EN 15058		
	Total VOCs	10 mg/m <sup>3</sup>			BS EN 12619:2013		
Flare	Hours of Operation	-	Annual Total		-	-	-

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

[2] an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed	Date