

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

DBE Energy Limited
Dunsfold Park AD Facility
Stovolds Hill
Cranleigh
Surrey
GU6 8TB

Permit number

EPR/GB3005XV

Dunsfold Park AD Facility

Permit number EPR/GB3005XV

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 an anaerobic digestion (AD) plant for the treatment of up to 25,000 tonnes per annum liquid and solid food waste. Solid waste food is macerated and put through a settlement tank. The waste material is pumped in a pasteurisation system and held in a holding tank for one hour at 70 °C to comply with Animal By-Product Regulations (ABPR). The material is pumped out of the holding tank and is mixed with any non-ABPR liquid waste and any recirculated digestate. It is then pumped into horizontal digestion tanks and digested. The digesting material produces a biogas, with the facility projected to produce approximately 2 million m³ of biogas per annum. The biogas is fed to a gas upgrade system where it is upgraded to methane for injection into the national gas grid. The digested material also produces a digestate which can be used as a fertiliser.

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/GB3005XV/A001	Duly made 11/04/18	Application for an anaerobic digestion facility with combustion of biogas.
Response to Schedule 5 notice dated 04/07/18	13/07/18	Revised Odour Management Plan. Environmental Risk Assessment. Further information on site management, operations and procedures. Further information on site engineering infrastructure and site operations. Further information on legal operator of the facility. Removal of waste code 07 01 08* from the application.
Response to Schedule 5 notice dated 18/09/18	04/10/18	Revised Odour Management Plan. Environmental Risk Assessment. Further information on site management, operations and procedures. Further information on site engineering infrastructure and site operations. Further information on legal operator of the facility. Revised application form Part B4.
Additional information received	22/10/18	Removal of surface water discharge from application. Removal of D1 activity from application. Removal of R1 activity from application as there are no gas engines.
Response to Schedule 5 notice dated 18/09/18	24/10/18	Revised Site Closure Plan.

Status log of the permit		
Description	Date	Comments
Response to Schedule 5 notice dated 18/09/18	02/11/18	Revised site plan showing emission points.
Permit determined EPR/GB3005XV	19/11/18	Permit issued to DBE Energy Limited.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/GB3005XV

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

DBE Energy Limited ("the operator"),

whose registered office is

Stovolds Hill

Cranleigh

Surrey

GU6 8LE

company registration number 10528569

to operate waste operations at

Dunsfold Park AD Facility

Stovolds Hill

Cranleigh

Surrey

GU6 8TB

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

Name	Date
Helen Smith	19/11/2018

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.

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

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, 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 table S3.1;
- (b) process monitoring specified in table S3.2.

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.

3.6 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:

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

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) 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	
Description of activities for waste operations	Limits of activities
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) R3: Recycling/reclamation of organic substances which are not used as solvents	Treatment operations shall be limited to: • Biological treatment consisting only of anaerobic digestion for the purpose of recovery (no more than 100 tonnes per day including waste and non waste solids and liquids). • Physical treatment including shredding, sorting, screening, compaction, baling, mixing, and maceration for the purpose of recovery. • Maturation of digestate. • The treatment capacity of any plant shall not exceed 10 tonnes per day of animal waste. • Treatment of digestate including screening to remove plastic residues, centrifuge or pressing, addition of thickening agents (polymers) or drying (other than for the purpose of use as a fuel). • Waste pasteurisation and chemical addition • Gas storage and drying. • Gas cleaning by biological or chemical scrubbing. • Gas cleaning and upgrading to biomethane. All bulking, transfer and pre-treatment of waste shall be carried out in an enclosed building. Waste types as specified in Table S2.1
Auxiliary flare D10: Incineration on land	Use of an auxiliary flare required only for short periods of breakdown or maintenance of the facility. 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 shall be recorded. All biogas condensate shall be discharged into a sealed drainage system or recirculated back to the digester.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Response to Schedule 5 notice response dated 18/09/18.	Documents provided in response to Question 24b), revised Part B4 of the application form section 3a – technical standards.	04/10/18

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	The operator shall carry out a monitoring study to verify the assumptions made in the application in relation to the releases of pollutants to air. The study shall include the monitoring of point source releases to air from the biogas upgrading plant emission point A3 during normal operation, having regard to the Environment Agency technical guidance M2 and to MCERTS standards. As a minimum, two separate monitoring campaigns in a year shall be completed (one monitoring survey six months following commissioning of the biogas upgrading plant). The pollutants to be monitored shall include: • total volatile organic compounds; and • hydrogen sulphide	19/11/19 or otherwise agreed in writing by the Environment Agency
IC2	Following the completion of IC1, the operator shall undertake an environmental impact assessment of all point source releases to air, using the information obtained through the emissions monitoring. The environmental impact assessment report and all associated monitoring reports and assessments shall be submitted in writing to the Environment Agency for review. The environmental impact assessment shall, as a minimum, include: • reports showing details of the monitoring undertaken and the results obtained; • results of the assessment of long and short term impacts from the emissions in accordance with Environment Agency Guidance – Air emissions risk assessment for your environmental permit • a completed H1 assessment software tool If the H1 assessment shows potential long or short term impacts from the emissions, the operator shall propose an action plan to reduce the impacts of the substances identified.	19/12/19 or otherwise agreed in writing by the Environment Agency
IC3	The operator shall submit a written report to the Environment Agency for approval. The report must summarise the environmental performance of the proposed odour abatement system (Ultimate 4 air treatment units) for the Reception Building and digestate offtake point as installed against the design parameters set out in the application. The report shall also include: • a review of the performance of the site's odour abatement system against the conditions of the permit; • details of procedures developed for achieving and demonstrating compliance with permit conditions; • details of a maintenance and inspection regime; and • any areas identified for improvement (including installation of additional odour abatement). The report shall contain dates for the implementation of any measures for improvements identified. The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the report. The operator shall implement the findings of the report in accordance with the Environment Agency's written approval.	19/08/19 or otherwise agreed in writing by the Environment Agency
IC4	If notified by the Environment Agency following its review of the report submitted under IC3 the operator shall submit for approval within the specified time a revised odour management plan. The revised odour management plan shall take into account the appropriate measures in H4 Odour Management guidance and a review of practices at the facility following completion of IC3. The review shall include, but not be limited to,	19/09/19 or otherwise agreed in writing by the Environment Agency

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	appropriate monitoring procedures to determine the saturation profile of the proposed carbon filters prior to odour breakthrough, appropriate monitoring procedures for the emissions from the gas storage pod and additional measures to reduce odour emissions to all media.	

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Permitted waste types and quantities for anaerobic digestion	
Maximum quantity	Annual throughput shall not exceed 25,000 tonnes.
Waste code	Description
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 01	sludges from washing and cleaning - vegetables, fruit and other crops
02 01 02	animal-tissue waste
02 01 03	plant-tissue waste
02 01 06	animal faeces, urine and manure (including spoiled straw) only
02 01 07	wastes from forestry
02 01 99	residues from commercial mushroom cultivation
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 01	sludges from washing and cleaning
02 02 02	animal-tissue waste
02 02 03	materials unsuitable for consumption or processing
02 02 04	sludges from on-site effluent treatment
02 02 99	sludges from gelatine production, animal gut contents
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
02 03 99	sludge from production of edible fats and oils to include seasoning residues, molasses residues, residues from production of potato, corn or rice starch
02 04	wastes from sugar processing
02 04 03	sludges from on-site effluent treatment
02 04 99	other biodegradable wastes
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing
02 05 02	sludges from on-site effluent treatment
02 06	wastes from the baking and confectionery industry
02 06 01	materials unsuitable for consumption or processing
02 06 03	sludges from on-site effluent treatment
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials

Table S2.1 Permitted waste types and quantities for anaerobic digestion	
Maximum quantity	Annual throughput shall not exceed 25,000 tonnes.
Waste code	Description
02 07 02	wastes from spirits distillation
02 07 04	materials unsuitable for consumption or processing
02 07 05	sludges from on-site effluent treatment
02 07 99	spent grains, hops and whisky filter sheets/cloths, yeast and yeast-like residues, sludge from production process
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 03	wastes from pulp, paper and cardboard production and processing
03 03 02	green liquor sludge
03 03 08	paper and cardboard – not allowed if any non biodegradable coating or preserving substance is present
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
04	Wastes from the leather, fur and textile industries
04 01	wastes from the leather and fur industry
04 01 01	fleshings and lime split wastes
04 01 05	tanning liquor free of chromium
04 01 07	sludges not containing chromium
04 02	wastes from the textile industry
04 02 10	organic matter from natural products, e.g. grease, wax
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging - not allowed if any biodegradable coating or preserving substance is present. Excludes laminates such as Tetrapaks
15 01 02	biodegradable plastic packaging - must be independently certified to BS EN 13432
15 01 03	Untreated wooden packaging - not allowed if any non-biodegradable coating or preserving substance is present
15 01 05	composite packaging - must conform to BS EN 13432 and not allowed if any non biodegradable coating or preserving substance is present
16	Wastes not otherwise specified in the list
16 10	aqueous liquid wastes destined for off-site treatment
16 10 02	liquor/leachate from a composting process that accepts waste input types listed in this table only
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 03	waste types listed in this table, Table S2.1, that have been mixed together only
19 02 06	sludge types from waste listed within this table, Table S2.1 that have been heat treated only

Table S2.1 Permitted waste types and quantities for anaerobic digestion	
Maximum quantity	Annual throughput shall not exceed 25,000 tonnes.
Waste code	Description
19 02 10	glycerol not designated as hazardous i.e. excludes EWC 19 02 08
19 06	wastes from anaerobic treatment of waste
19 06 03	liquor from anaerobic treatment of municipal waste (from a process that treats wastes which are listed in this table only)
19 06 04	digestate from anaerobic treatment of source segregated biodegradable waste (from a process that treats wastes which are listed in this table only)
19 06 05	liquor from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table only)
19 06 06	digestate from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table only)
19 08	wastes from waste water treatment plants not otherwise specified
19 08 09	grease and oil mixture from oil/water separation containing only edible oil and fats
19 08 12	sludges from biological treatment of industrial waste water
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 12	waste types listed in this table, Table S2.1, that have been subjected to mechanical treatment only
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard - not allowed if any non-biodegradable coating or preserving substance is present. Excludes laminates such as Tetrapaks
20 01 08	biodegradable kitchen and canteen waste
20 01 25	edible oil and fat
20 01 38	untreated wood where no non-biodegradable coating or preserving substance is present
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 03	other municipal wastes
20 03 01	mixed municipal waste - only separately collected biodegradable wastes of types listed within this table, Table S2.1
20 03 02	waste from markets - allowed only if source segregated biodegradable fractions e.g. plant material, fruit and vegetables

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [Point A2 on site plan in schedule 7]	3 Boiler flues	No parameter set	No limit set			
A2 [Point A2 on site plan in schedule 7]	Emergency flare [note 1]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	150 mg/m ³	Hourly average	[note 2]	BS EN 14792
		Carbon monoxide	50 mg/m ³			BS EN 15058
		Total VOCs	10 mg/m ³			BS EN 12619:2013
A3 [Point A3 on site plan in schedule 7]	Biogas upgrading plant stack	No parameter set [note 3]	No limit set [note 3]	--	--	--
A4 to A11 [Point A4 to A11 on site plan in schedule 7]	Pressure relief valves	No parameter set	No limit set	--	Record of operating hours	--
A12	Pressure relief valves for the following: 4 x buffer tanks 3 x Post Digestate tanks 2 x Pasteurisation tanks	No parameter set	No limit set			
A13	Pressure relief valve for: 1 x Post digestate tank	No parameter set	No limit set			
A14	Vent from Reception building	No parameter set	No limit set			
Vents from tank(s)	Oil/Fuel Storage tank(s)	No parameter set	No limit set	--	--	--
Note 1 - 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.						

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Note 2 - 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 3 - Monitoring requirements to be reviewed by the Environment Agency following the completion of improvement conditions 1 and 2.						

Table S3.2 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Biogas from Digester(s)	Flow	Continuous	In accordance with EU weights and measures Regulations	--
Biogas from Digester(s)	Methane	Continuous	--	Gas monitors to be calibrated in accordance with manufacturer's recommendations
	Hydrogen sulphide	Continuous	None Specified	--
Waste reception building; Digester(s) and storage tank(s)	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary
Carbon filtration system	Key process parameters to include pH, temperature and air flow	In accordance with manufacturer's recommendations.	None specified	Odour abatement system shall be regularly checked and maintained to ensure appropriate temperature and moisture content. Carbon filter(s) to be replaced when saturated in accordance with manufacturer's recommendations.
Storage tank(s)	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.

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1.	A2	Every 12 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

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	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
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	
Date	

* authorised to sign on behalf of the operator

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.

“Annex I” means Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“Annex II” means Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“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.

“compost” means solid particulate material that is the result of composting, which has been sanitised and stabilised, and which confers beneficial effects when added to soil, used as a component of growing media or used in another way in conjunction with plants.

“compostable plastics” means plastics that are certified to meet the standards of EN 13432, EN 14995 or equivalent.

“composting” means the biological decomposition of organic materials, under conditions that are predominantly aerobic and that allow the development of thermophilic temperatures as a result of biologically produced heat.

“digestate” means material resulting from an anaerobic digestion process.

“disposal” means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“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.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 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.

“impermeable surface” means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the pavement surface.

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“nearest sensitive receptors” means the nearest place to the permitted activities where people are likely to be for prolonged periods. This term would therefore apply to dwellings (including any associated gardens) and to many types of workplaces. We would not normally regard a place where people are likely to be

present for less than 6 hours at one time as being a sensitive receptor. The term does not apply to those controlling the permitted facility, their staff when they are at work or visitors to the facility, as their health is covered by Health and Safety at Work legislation, but would apply to dwellings occupied by the family of those controlling the facility.

“pests” means birds, vermin and insects.

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

“recovery” means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“sealed drainage system” in relation to an impermeable surface, means a drainage system with impermeable components which does not leak and which will ensure that:

- (a) no liquid will run off the surface otherwise than via the system;
- (b) except where they may be lawfully be discharged to foul sewer, all liquids entering the system are collected in a sealed sump.

“stable, stabilised” means the degree of processing and biodegradation at which the rate of biological activity has slowed to an acceptably low and consistent level and will not significantly increase under favourable, altered conditions.

“treated wood” is any wood that has been chemically treated (e.g. to enhance or alter the performance of the original wood). Treatments may include penetrating oils, tar oil preservatives, waterborne preservatives, organic-based preservatives, boron and organo-metallic based preservatives, boron and halogenated flame retardants and surface treatments (including paint and veneer)

“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.

When the following terms appear in the waste code list in Schedule 2, table S2.1 (or if more than one table state the table references), for that table they have the meaning given below:

“hazardous substance” means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008.

“heavy metal” means any compound of antimony, arsenic, cadmium, chromium (VI), copper, lead, mercury, nickel, selenium, tellurium, thallium and tin, as well as these materials in metallic form, as far as these are classified as hazardous substances.

“PCBs” means

- polychlorinated biphenyls
- polychlorinated terphenyls
- monomethyl-tetrachlorodiphenyl methane, Monomethyl-dichloro-diphenyl methane, Monomethyldibromo-diphenyl methane
- any mixture containing any of the above mentioned substances in a total of more than 0,005 %by weight.

“transition metals” means any of the following metals: any compound of scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum, as well as these materials in metallic form, as far as these are classified as hazardous substances.

“stabilisation” means processes which change the hazardousness of the constituents in the waste and transform hazardous waste into non-hazardous waste.

“solidification” means processes which only change the physical state of the waste by using additives without changing the chemical properties of the waste.

“partly stabilised wastes” means wastes containing, after the stabilisation process, hazardous constituents which have not been changed completely into non-hazardous constituents and could be released into the environment in the short, middle or long term.

Schedule 7 – Site plan



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END OF PERMIT

Permit Number:	EPR/GB3005XV	Operator:	DBE Energy Limited
Facility:	Dunsfold Park 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 [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A1	Oxides of nitrogen (NO and NO2 expressed as NO2)	500 mg/m3	1 hour period		BS EN 14792		
A1	Sulphur dioxide	350 mg/m3	1 hour period		BS EN 14791		
A1	Carbon monoxide	1400 mg/m3	1 hour period		BS EN 15058		
A1	Total VOCs	1000 mg/m3	1 hour period		BS EN 12619:2013		
A2	Oxides of nitrogen (NO and NO2 expressed as NO2)	150 mg/m3	1 hour period		BS EN 14792		
A2	Carbon monoxide	50 mg/m3	1 hour period		BS EN 15058		
A2	Total VOCs	10 mg/m3	1 hour period		BS EN 12619:2013		

- [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] Where 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.....

(Authorised to sign as representative of Operator)