

# Permit with introductory note

## The Environmental Permitting (England & Wales) Regulations 2016

---

BioConstruct NewEnergy Limited

Hartlepool BioPower Anaerobic Digestion Plant  
Brenda Road  
Hartlepool  
Teesside  
TS25 2BW

### **Permit number**

**EPR/CP3834YH**

# Hartlepool BioPower Anaerobic Digestion Plant

## Permit number EPR/CP3834YH

### Introductory note

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

The main features of the permit are as follows:

The Installation is located at Brenda Road near Hartlepool, Teesside at national grid reference NZ 451454 528363. The Installation is bordered to the north, south and east by industrial and commercial units and a railway line to the west. The nearest residential property is located on Bilsdale Road, about 620 metres to the north east with other residential properties located around 1.2 km north and 1.8 km west.

The Installation will comprise the following operations:

- Anaerobic digestion plant (two primary digesters and one post digester);
- A reception building containing seven pre-storage tanks;
- Combustion plant consisting of four combined heat and power (CHP) engines (12.5 MW aggregated) and one emergency flare;
- Four digestate storage tanks; and
- Odour abatement (de-sulphurisation plant, scrubber, activated carbon filters and UV reactor)

The Installation has been designed to process up to 300 tonnes per day of waste consisting of food waste, agricultural waste and green waste, with a maximum annual throughput of 108,700 tonnes. Liquid waste will arrive in sealed tankers and will be pumped into the pre-storage tanks. The pre-storage tanks are located within a reception building that is provided with fast acting doors, kept under negative pressure and fitted with an extraction and odour abatement system. The solid waste (seasonal green waste) is received within an outside reception area where it is loaded into the digestion process.

Biological treatment via anaerobic digestion will take place in two primary digestion tanks where the waste is held for approximately 44 days and a post digestion tank, where it is held for approximately 21 days to ensure maximum biogas capture. The temperature in the digesters will be maintained between 35°C and 40°C.

The by-product from the process (whole digestate) will be pumped to pasteurisation tanks where the waste will undergo heat treatment at 70°C for a minimum of one hour as required by the Animal By-Products Regulations. The heat-treated digestate will be transferred to the digestate storage tanks prior to removal from site for use as a soil improver. This environmental permit does not authorise the spreading of digestate on land.

Biogas drawn from the digesters will pass through a de-sulphurisation process and will be subsequently combusted in four CHP engines. The majority of the electricity produced will be fed into the National Grid with a proportion used at the facility. The heat produced from the engines will be recovered via heat exchangers and integrated in the process heating requirements including the pasteurisation of waste. Biogas will be burnt in the emergency flare in the event it cannot be utilised by the CHP engines.

Main releases to air will be odour emissions from the processing of waste, odour abatement and emissions from the combustion of biogas (CHP engines and emergency flare). Oxides of nitrogen, sulphur dioxide, carbon monoxide and total volatile organic compounds will be monitored periodically. There will be no process discharges to controlled waters. Uncontaminated site surface water run-off arising from rain will be discharged to a surface water drain.

The site will be provided with hardstanding and secondary containment constructed in line with industry best practice standards to reduce the impact of pollution to surface water and groundwater. An Environmental Management System (EMS) will be in place prior to the commencement of site operations.

There are three internationally designated ecological sites within 10 km of the Installation (Durham Coast SAC, Teesmouth and Cleveland Coast SPA / Ramsar and Northumbria Coast SPA). Ten non-statutory sites and three Sites of Special Scientific Interest are located within 2 km of the Installation. Assessment by the Environment Agency shows that emissions from the Installation are unlikely to have an adverse impact on interest features of the ecological sites.

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

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application EPR/CP3834YH/A001	Duly made 22/08/17	Application for an anaerobic digestion facility with combustion of resultant biogas.
Additional information received	28/09/17	Response #1 to Schedule 5 Notice dated 14/09/17.
Additional information received	02/10/17	Response #2 to Schedule 5 Notice dated 14/09/17.
Additional information received	12/10/17	Response #3 to Schedule 5 Notice dated 14/09/17.
Additional information received	13/10/17	Model input files.
Additional information received	20/10/17	Response #1 to Schedule 5 Notice dated 17/10/17.
Additional information received	01/11/17	Response #2 to Schedule 5 Notice dated 17/10/17.
Additional information received	03/11/17	Sulphur dioxide impact on ecological sites.
Additional information received	15/11/17	Response #3 to Schedule 5 Notice dated 17/10/17.
Additional information received	17/11/17	Additional information regarding NOx emission limits.
Additional information received	05/12/17	Additional information regarding site commissioning plan and pre-commissioning certificates.
Additional information received	14/12/17	Additional information regarding secondary containment and commissioning timescales.
Permit determined (Billing Reference: CP3834YH)	18/12/17	Permit issued to BioConstruct NewEnergy Limited.

End of introductory note

# Permit

## The Environmental Permitting (England and Wales) Regulations 2016

### Permit number

**EPR/CP3834YH**

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

**BioConstruct NewEnergy Limited** (“the operator”),

whose registered office is

**P. O. Box M7 4LE  
441 Bury New Road  
Salford  
M7 4LE**

company registration number 09112259

to operate an installation at

**Hartlepool BioPower Anaerobic Digestion Plant  
Brenda Road  
Hartlepool  
Teesside  
TS25 2BW**

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

Name	Date
Mike Jenkins	18/12/2017

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 Energy efficiency

- 1.2.1 The operator shall:
- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
  - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) take any further appropriate measures identified by a review.

### 1.3 Efficient use of raw materials

- 1.3.1 The operator shall:
- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
  - (b) maintain records of raw materials and water used in the activities;
  - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
  - (d) take any further appropriate measures identified by a review.

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

- 1.4.1 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.

- 1.4.2 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”).
- 2.1.2 Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

### **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 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table S2.2; and
  - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.
- 2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

### **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 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

### **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.

### **3.4 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 Pests**

- 3.5.1 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.
- 3.5.2 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.

### **3.6 Monitoring**

- 3.6.1 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.
- 3.6.2 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.
- 3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.6.4 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 tables S3.1 and S3.2 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 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
- (b) the annual production/treatment data set out in schedule 4 table S4.2; and
- (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

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 S4.4; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.2.5 Within 1 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.

## 4.3 Notifications

4.3.1 In the event:

- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
  - (i) inform the Environment Agency,
  - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition the operator must immediately—
  - (i) inform the Environment Agency, and
  - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;

(c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, 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.

4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

## **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 "immediately", in which case it may be provided by telephone.

# Schedule 1 – Operations

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
AR1	S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 100 tonnes per day involving biological treatment.	R3: Recycling/reclamation of organic substances which are not used as solvents	From receipt of waste through to digestion and recovery of by-products (digestate).  Anaerobic digestion of waste in three tanks followed by burning of biogas produced from the process.  Waste types suitable for acceptance are limited to those specified in Table S2.2.
<b>Directly Associated Activity</b>			
AR2	Storage of waste pending recovery or disposal	R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced)	Undertaken in relation to Activity A1.  From the receipt of permitted waste to pre-treatment and despatch for anaerobic digestion on site.  Storage of residual wastes from pre-treatment to despatch off-site for recovery.  Storage of waste in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with a sealed drainage system.  Waste types suitable for acceptance are limited to those specified in Table S2.2
AR3	Physical treatment for the purpose of recycling	R3: Recycling/reclamation of organic substances which are not used as solvents	Undertaken in relation to Activity A1.  From the receipt of waste to despatch for anaerobic

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
			<p>digestion or despatch off site for recovery.</p> <p>Pre-treatment of waste in enclosed building and on impermeable surface with sealed drainage system including shredding, sorting, screening, compaction, baling, mixing and maceration.</p> <p>Heat treatment (pasteurisation) of waste in 5 air-tight tanks on an impermeable surface with sealed drainage system for the purpose of recovery.</p> <p>Gas cleaning by biological or chemical scrubbing.</p> <p>Waste types suitable for acceptance are limited to those specified in Table S2.2.</p>
AR4	Steam and electrical power supply	R1:Use principally as a fuel to generate energy	<p>Undertaken in relation to Activity A1.</p> <p>From the receipt of biogas produced at the on-site anaerobic digestion process to combustion with the release of combustion gases.</p> <p>Combustion of biogas in four combined heat and power (CHP) engines with an aggregated thermal input of 12.5 MWth.</p>
AR5	Emergency flare operation	D10: Incineration on land	<p>Undertaken in relation to Activity A1.</p> <p>From the receipt of biogas produced at the on-site anaerobic digestion process to incineration with the release of combustion gases.</p>

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
			Use of one auxiliary flare required only during periods of breakdown or maintenance of the CHP engines.
AR6	Raw material storage	Storage of raw materials including lubrication oil, antifreeze, ferric chloride, activated carbon, diesel and anti-foaming agents.	Undertaken in relation to Activity A1.  From the receipt of raw materials to despatch for use within the facility.
AR7	Gas storage	Storage of biogas produced from on-site anaerobic digestion of permitted waste in roof space of digesters and digestate storage tanks.  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)	Undertaken in relation to Activity A1.  From the receipt of biogas produced at the on-site anaerobic digestion process to despatch for use within the facility.
AR8	Digestate storage	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)	Undertaken in relation to Activity A1.  From the receipt of processed uncertified digestate produced from the on-site anaerobic digestion process to despatch for use off-site.  Storage of processed uncertified whole digestate in four storage tanks.
AR9	Abatement of odour emissions	Collection and treatment of odorous air from site processes using scrubber, filter, UV /ozone reactor and activated carbon systems	Undertaken in relation to Activity A1.  From the collection of odorous air from site processes to treatment and release of treated air to atmosphere.

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application	BAT Statement, Operating Techniques, Odour Management Plan and Environmental Risk Assessment & Accident Management Plan of the application supporting document.	24/05/17
Response to Schedule 5 Notice dated 14/09/17	Response to questions detailing secondary containment, raw materials, site operating techniques, site drainage and odour management.	28/09/17 & 02/10/17
Additional information	Response to further questions detailing secondary containment, site operating techniques, site drainage and odour management.	12/10/17
Response to Schedule 5 Notice dated 17/10/17	Additional information in relation to monitoring of site surfaces and handling of contaminated site surface water.	20/10/17
Additional information	Additional information regarding site commissioning plan and pre-commissioning certificates.	05/12/17
Additional information	Additional information regarding secondary containment and commissioning timescales.	14/12/17

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC1	The operator shall undertake olfactory monitoring to BS EN 13725 within and external to the reception building to demonstrate the performance of the odour management systems. A written report, summarising the outcome of the monitoring, shall be submitted to the Environment Agency.	3 months following the end of commissioning of the Installation.
IC2	<p>The operator shall submit a written report to the Environment Agency for approval. The report must summarise the environmental performance of the proposed site odour abatement system as installed against the design parameters set out in the Application. The report shall also include:</p> <ul style="list-style-type: none"> <li>• a review of the performance of the site's odour abatement system against the conditions of the permit;</li> <li>• details of procedures developed for achieving and demonstrating compliance with permit conditions;</li> <li>• details of a maintenance and inspection regime; and</li> <li>• any areas identified for improvement (including installation of additional odour abatement).</li> </ul> <p>The report must contain dates for the implementation of individual measures.</p> <p>The operator shall implement the findings of the report as approved, and from the date stipulated by the Environment Agency.</p>	6 months following the end of commissioning of the Installation.
IC3	<p>The operator shall submit a report of the commissioning of the site secondary containment to the Environment Agency that shall include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• a review of the effectiveness of the functioning and containment provided by the flood gates;</li> </ul>	6 months following the end of commissioning of the Installation.

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
	<ul style="list-style-type: none"> <li>• details of any additional procedures developed during commissioning for achieving satisfactory containment.</li> <li>• details of a maintenance and inspection regime; and</li> <li>• any areas identified for improvement.</li> </ul> <p>The report must contain dates for the implementation of individual measures.</p> <p>The operator shall implement the findings of the report as approved, and from the date stipulated by the Environment Agency.</p>	

## Schedule 2 – Waste types, raw materials and fuels

Raw materials and fuel description	Specification
Fuel oil	<0.1% sulphur content

Maximum quantity	Annual throughput shall not exceed 108,700 tonnes
Waste code	Description
<b>02</b>	<b>Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
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
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
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
<b>02 03</b>	<b>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</b>
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
<b>02 04</b>	<b>wastes from sugar processing</b>
02 04 03	sludges from on-site effluent treatment
02 04 99	other biodegradable wastes
<b>02 05</b>	<b>wastes from the dairy products industry</b>
02 05 01	materials unsuitable for consumption or processing
02 05 02	sludges from on-site effluent treatment
<b>02 06</b>	<b>wastes from the baking and confectionery industry</b>



<b>Table S2.2 Permitted waste types and quantities for anaerobic digestion</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 108,700 tonnes</b>
<b>Waste code</b>	<b>Description</b>
02 06 01	materials unsuitable for consumption or processing
02 06 03	sludges from on-site effluent treatment
<b>02 07</b>	<b>wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)</b>
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials
02 07 02	wastes from spirits distillation
02 07 04	materials unsuitable for consumption or processing
02 07 99	spent grains, hops and whisky filter sheets/cloths, yeast and yeast-like residues, sludge from production process
<b>03</b>	<b>Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard</b>
<b>03 03</b>	<b>wastes from pulp, paper and cardboard production and processing</b>
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
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10
<b>04</b>	<b>Wastes from the leather, fur and textile industries</b>
<b>04 01</b>	<b>wastes from the leather and fur industry</b>
04 01 01	fleshings and lime split wastes
04 01 05	tanning liquor free of chromium
04 01 07	sludges not containing chromium
<b>04 02</b>	<b>wastes from the textile industry</b>
04 02 10	organic matter from natural products, e.g. grease, wax
<b>15</b>	<b>Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging – not allowed if any non 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
<b>16</b>	<b>Wastes not otherwise specified in the list</b>
<b>16 10</b>	<b>aqueous liquid wastes destined for off-site treatment</b>
16 10 02	liquor/leachate from a composting process that accepts waste input types listed in this table only
<b>19</b>	<b>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</b>

<b>Table S2.2 Permitted waste types and quantities for anaerobic digestion</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 108,700 tonnes</b>
<b>Waste code</b>	<b>Description</b>
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
19 02 03	waste types listed within this table, Table S2.2, that have been mixed together only
19 02 10	glycerol not designated as hazardous i.e. excludes EWC code 19 02 08
<b>19 05</b>	<b>wastes from aerobic treatment of solid wastes</b>
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
<b>19 06</b>	<b>wastes from anaerobic treatment of waste</b>
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)
<b>19 08</b>	<b>wastes from waste water treatment plants not otherwise specified</b>
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
<b>20</b>	<b>Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
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
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 01	biodegradable waste
<b>20 03</b>	<b>other municipal wastes</b>
20 03 01	mixed municipal waste – only separately collected biodegradable wastes of types listed within this table, Table S2.2
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 A1 on Drawing 13-1113.114, Rev A2 Sept 17]	CHP engine 1 stack [note 1]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	450 mg/m <sup>3</sup>	Hourly average	Annual	BS EN 14792
		Sulphur dioxide	10 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
A2 [Point A2 on Drawing 13-1113.114, Rev A2 Sept 17]	CHP engine 2 stack [note 1]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	450 mg/m <sup>3</sup>	Hourly average	Annual	BS EN 14792
		Sulphur dioxide	10 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
A3 [Point A3 on Drawing 13-1113.114, Rev A2 Sept 17]	CHP engine 3 stack [note 1]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	450 mg/m <sup>3</sup>	Hourly average	Annual	BS EN 14792
		Sulphur dioxide	10 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
A4 [Drawing 13-1113.114, Rev A2 Sept 17]	CHP engine 4 stack [note 1]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	450 mg/m <sup>3</sup>	Hourly average	Annual	BS EN 14792
		Sulphur dioxide	10 mg/m <sup>3</sup>			BS EN 14791

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
		Carbon monoxide	1400 mg/m <sup>3</sup>			BS EN 15058
		Total VOCs	1000 mg/m <sup>3</sup>			BS EN 12619:2013
A5 [Drawing 13-1113.114, Rev A2 Sept 17]	Emergency flare stack [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
A6 [Drawing 13-1113.114, Rev A2 Sept 17]	Odour abatement stack	No parameter set	No limit set	--	--	--
A7 [Drawing 13-1113.114, Rev A2 Sept 17]	Desulphurisation stack	No parameter set	No limit set	--	--	--
V1 to V5 [Drawing 13-1113.114, Rev A2 Sept 17]	Pasteurisers	No parameter set	No limit set	--	--	--
V6 to V12 [Drawing 13-1113.114, Rev A2 Sept 17]	Digesters /Digestate storage tanks	No parameter set	No limit set	--	Record of operating hours	--
Vents from tank(s)	Oil/Fuel Storage tank(s)	No parameter set	No limit set	--	--	--
<p>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 section 4.5.1 of LFTGN08 v2 2010 shall apply.</p> <p>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 section 5.3.1 of LFTGN05 v2 2010 shall apply.</p> <p>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). Record of operating hours to be submitted annually to the Environment Agency.</p>						

<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. unit)</b>	<b>Reference Period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
SW1 on site plan in schedule 7 emission to surface water drain	Uncontaminated site surface water from roofs and non-operational areas	Oil or grease	No visible oil or grease	Spot sample	Weekly	Visual assessment
	Uncontaminated water from bunded area	Biochemical oxygen demand (BOD)	No limit set	Spot sample	[note 1]	In accordance with Environment Agency's Technical Guidance Note - M18 Monitoring of discharges to water and sewer.
<p>Note 1 – In the event monitoring data shows that surface water is contaminated, there shall be no further discharges from to the surface water drain until the source of the contamination is investigated and remedied.</p>						

<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Biogas from Digesters	Flow	Continuous	In accordance with EU weights and measures Regulations	--
Biogas from Digesters	Methane	Continuous	None specified	Gas monitors to be calibrated every 6 months or in accordance with the manufacturer's recommendations.
	Hydrogen sulphide	Daily	None specified	--
Waste reception building; Digesters and digestate storage tanks	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary.
Digesters and all storage tanks	Integrity checks	Weekly	Visual assessment	--
Odour abatement system	In accordance with manufacturer's recommendations.	In accordance with manufacturer's recommendations.	None specified	Odour abatement system shall be regularly checked and maintained to

<b>Table S3.3 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
				ensure appropriate temperature and moisture content (where applicable).  Carbon filters to be replaced when saturated in accordance with manufacturer's recommendations.
Representative sample of each digester's contents	Key parameters to include temperature, ammonia, hydraulic loading rate, organic loading rate, alkalinity and pH	As described in Application	As described in Application	--

## 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 3.6.1.	A1, A2, A3, A4, A5.	Every 12 months	1 January
Emissions to water Parameters as required by condition 3.6.1.	SW1	Every 6 months	1 January

Parameter	Units
Electricity generated	MWh
Whole digestate	tonnes

Parameter	Frequency of assessment	Units
Water usage	Annually	m <sup>3</sup>
Energy usage	Annually	MWh
Raw material usage	Annually	tonnes or m <sup>3</sup>
Emergency flare operation	Annually	hours
Electricity exported	Annually	MWh
CHP engine usage	Annually	hours
CHP engine efficiency	Annually	%

Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Environment Agency	18/12/17
Water	Form water 1 or other form as agreed in writing by the Environment Agency	18/12/17
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	18/12/17
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	18/12/17
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	18/12/17
Waste returns	E-waste Return Form or other form as agreed in writing by the Environment Agency	--

# 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	

<b>(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</b>	
<b>To be notified within 24 hours of detection</b>	
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>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	



<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Measures taken, or intended to be taken, to stop the emission	

<b>Time periods for notification following detection of a breach of a limit</b>	
<b>Parameter</b>	<b>Notification period</b>

<b>(c) Notification requirements for the detection of any significant adverse environmental effect</b>	
<b>To be notified within 24 hours of detection</b>	
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.

“ADQP” means Anaerobic Digestion Quality Protocol

“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.

“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.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

“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.

“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:

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

“treated wood” means 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, water-borne preservatives, organic-based preservatives, boron and organo-metallic based preservatives, boron and halogenated flame retardants and surface treatments (including paint and venner).

“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.

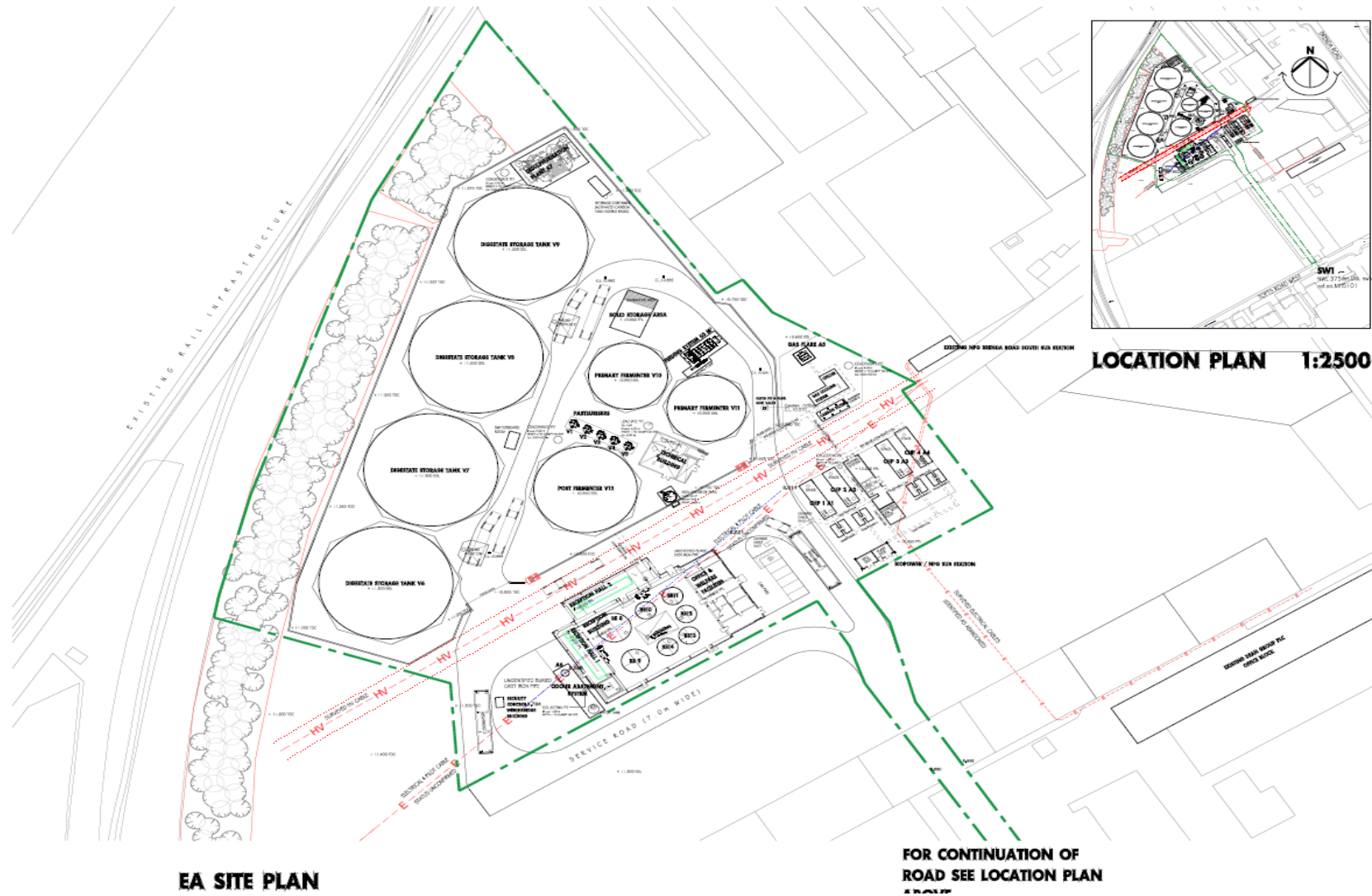
“year” means calendar year ending 31 December.

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 fuels, 5% for 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



END OF PERMIT

Permit number  
EPR/CP3834YH

<b>Permit Number:</b>	<b>EPR/CP3834YH</b>	<b>Operator:</b>	<b>BioConstruct NewEnergy Limited</b>
<b>Facility:</b>	<b>Hartlepool BioPower Anaerobic Digestion Plant</b>	<b>Form Number:</b>	<b>Air1 / 18/12/17</b>

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

<b>Emission Point</b>	<b>Substance / Parameter</b>	<b>Emission Limit Value</b>	<b>Reference Period</b>	<b>Result [1]</b>	<b>Test Method [2]</b>	<b>Sample Date and Times [3]</b>	<b>Uncertainty [4]</b>
A1	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	450 mg/m <sup>3</sup>	1 hour period		BS EN 14792		
A1	Sulphur dioxide	10 mg/m <sup>3</sup>	1 hour period		BS EN 14791		
A1	Carbon monoxide	1400 mg/m <sup>3</sup>	1 hour period		BS EN 15058		
A1	Total VOCs	1000 mg/m <sup>3</sup>	1 hour period		BS EN 12619:2013		
A2	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	450 mg/m <sup>3</sup>	1 hour period		BS EN 14792		
A2	Sulphur dioxide	10 mg/m <sup>3</sup>	1 hour period		BS EN 14791		
A2	Carbon monoxide	1400 mg/m <sup>3</sup>	1 hour period		BS EN 15058		
A2	Total VOCs	1000 mg/m <sup>3</sup>	1 hour period		BS EN 12619:2013		
A3	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	450 mg/m <sup>3</sup>	1 hour period		BS EN 14792		
A3	Sulphur dioxide	10 mg/m <sup>3</sup>	1 hour period		BS EN 14791		
A3	Carbon monoxide	1400 mg/m <sup>3</sup>	1 hour period		BS EN 15058		

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A3	Total VOCs	1000 mg/m <sup>3</sup>	1 hour period		BS EN 12619:2013		
A4	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	450 mg/m <sup>3</sup>	1 hour period		BS EN 14792		
A4	Sulphur dioxide	10 mg/m <sup>3</sup>	1 hour period		BS EN 14791		
A4	Carbon monoxide	1400 mg/m <sup>3</sup>	1 hour period		BS EN 15058		
A4	Total VOCs	1000 mg/m <sup>3</sup>	1 hour period		BS EN 12619:2013		
A5	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	150 mg/m <sup>3</sup>	1 hour period		BS EN 14792		
A5	Carbon monoxide	50 mg/m <sup>3</sup>	1 hour period		BS EN 15058		
A5	Total VOCs	10 mg/m <sup>3</sup>	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)

<b>Permit Number:</b>	<b>EPR/CP3834YH</b>	<b>Operator:</b>	<b>BioConstruct NewEnergy Limited</b>
<b>Facility:</b>	<b>Hartlepool BioPower Anaerobic Digestion Plant</b>	<b>Form Number:</b>	<b>Water1 / 18/12/17</b>

**Reporting of emissions to water (other than to sewer) and land for the period from DD/MM/YYYY to DD/MM/YYYY**

<b>Emission Point</b>	<b>Substance / Parameter</b>	<b>Emission Limit Value</b>	<b>Reference Period</b>	<b>Result [1]</b>	<b>Test Method [2]</b>	<b>Sample Date and Times [3]</b>	<b>Uncertainty [4]</b>
SW1	Oil or grease						
SW1	BOD						

[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)

<b>Permit Number:</b>	<b>EPR/CP3834YH</b>	<b>Operator:</b>	<b>BioConstruct NewEnergy Limited</b>
<b>Facility:</b>	<b>Hartlepool BioPower Anaerobic Digestion Plant</b>	<b>Form Number:</b>	<b>WaterUsage1 / 18/12/17</b>

**Reporting of Water Usage for the year \_\_\_\_\_**

<b>Water Source</b>	<b>Usage (m<sup>3</sup>/year)</b>	<b>Specific Usage (m<sup>3</sup>/unit output)</b>
Mains water		
<b>TOTAL WATER USAGE</b>		

Operator's comments:

Signed .....

Date.....

(Authorised to sign as representative of Operator)



<b>Permit Number:</b>	<b>EPR/CP3834YH</b>	<b>Operator:</b>	<b>BioConstruct NewEnergy Limited</b>
<b>Facility:</b>	<b>Hartlepool BioPower Anaerobic Digestion Plant</b>	<b>Form Number:</b>	<b>Energy1 / 18/12/17</b>

### Reporting of Energy Usage for the year

Energy Source	Energy Usage		Specific Usage (MWh/unit output)
	Quantity	Primary Energy (MWh)	
Electricity *	MWh		
Natural Gas	MWh		
Gas Oil	tonnes		
Biogas	tonnes		
TOTAL	-		

\* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments:
----------------------

Signed .....

Date.....

(Authorised to sign as representative of Operator)

<b>Permit Number:</b>	<b>EPR/CP3834YH</b>	<b>Operator:</b>	<b>BioConstruct NewEnergy Limited</b>
<b>Facility:</b>	<b>Hartlepool BioPower Anaerobic Digestion Plant</b>	<b>Form Number:</b>	<b>Performance1 / 18/12/17</b>

**Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY**

<b>Parameter</b>	<b>Units</b>
Total raw material used	tonnes
CHP engine usage	hours
CHP engine efficiency	%
Emergency flare operation	hours
Electricity exported	MWh

Operator's comments:

Signed .....

Date.....

(Authorised to sign as representative of Operator)