

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

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Andigestion Limited

Holsworthy Biogas Plant

Chilsworthy

Holsworthy

Devon

EX22 7HH

**Variation application number**

EPR/NP3036TM/V011

**Permit number**

EPR/NP3036TM

# Holsworthy Biogas Plant

## Permit number EPR/NP3036TM

### Introductory note

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

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

#### **Changes introduced by this variation made by the operator**

The consolidated variation authorises the following changes:

- The replacement of combined heat and power (CHP) engine 2 with a model of the same size and specification. The associated emission point A3 will remain to serve the new CHP engine.
- The relocation of the tipping of the wheelie bin food waste collection from the main reception building to a dedicated wheelie bin processing building. The building is fully enclosed with a sealed drainage system and an air extraction and treatment system for odour management.
- Revision of the current surface and groundwater monitoring requirements including the addition of two groundwater boreholes (BH5 and BH6), amendment of the monitoring frequency (from every six months to every three months), addition of tighter limits and removal of the ammoniacal nitrogen and electrical conductivity limits for the 14 onsite leak detection wells.

#### **Changes introduced by this variation notice/statutory review**

The Industrial Emissions Directive (IED) came into force on 7 January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) Conclusions as described in the Commission Implementing Decision. Article 21(3) of the IED requires the Environment Agency to review conditions in permits that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions. The BAT Conclusions for Waste Treatment (the BREF) was published on 17 August 2018 following a European Union wide review of BAT, implementing decision (EU) 2018/1147 of 10 August 2018.

The scope of the permit review also covers the assessment of:

- the bioaerosols monitoring and compliance with M9 bioaerosols monitoring requirements;
- the design and construction of secondary containment and storage lagoons;
- the available storage facilities and measures to reduce ammonia emissions from storage; and
- information on existing medium combustion plant and/or specified generators on site.

This variation has been issued to update some of the conditions following a statutory review of the permits in the industry sector for biowaste treatment. The opportunity has also been taken to consolidate the original permit and subsequent variations.

## Brief description of the process

Andigestion limited operate Holsworthy Biogas Plant, the site is located in a semi-rural area approximately 1 km north of the town of Holsworthy centred on National Grid Reference 34543 05788.

The permit authorises the operator to operate the site as a S6.8 A(1)(c) activity under the Environmental Permitting Regulations 2016 as follows:

*'Disposing of or recycling animal carcasses or animal waste, other than by rendering in a small waste incineration plant, at a plant with a treatment capacity exceeding 10 tonnes per day of animal carcasses or animal waste or both in aggregate.'*

The facility accepts and treats biodegradable source segregated materials arising from industrial food wastes, animal by-products and municipal organic food waste. The maximum quantity of waste authorised for acceptance at the site is 160,000 tonnes per year with an 80,000 tonnes per year limit on the processing of organic (food) waste. The site also operates a food waste collection service for local businesses, where clean wheelie bins are dropped off and at the same time full bins are brought back to the site for treatment. All waste is treated by anaerobic digestion.

Food waste is received directly into the main reception hall which has sealed drainage and fast acting shutter doors. The reception hall is operated under negative pressure and is served by its own dedicated odour abatement treatment system. Food waste which is collected by the collection service is brought to the site in sealed wheelie bins which are delivered straight to the wheelie bin processing building. The bins are tipped into a trailer which is moved to the main reception hall for processing. The wheelie bin processing building has sealed drainage and a dedicated odour abatement system. All waste is reduced to a 12 mm particle size before heated in pasteuriser tanks at a temperature of 70 °C for a period of one hour to kill all pathogens in accordance with the Animal By-Products Regulations.

Following pasteurisation, the food waste is pumped into four digester tanks, which can process 80,000 m<sup>3</sup> per year of organic material. The food waste stays within the digester tanks for approximately 55 days. After anaerobic digestion, the digested material (digestate) is pumped into storage ready to be used a liquid fertiliser which is spread to land as a replacement for mineral fertilisers.

Biogas produced by the digestion process is burnt in six onsite combined heat and power (CHP) engines with an aggregated thermal input of 14.8 MWth. In addition, there is a back-up biogas boiler with a thermal input of 575 kWth. The electricity produced by the CHP engines is used to power the site. The heat from the hot water cooling system is recovered to heat the digestate during pasteurisation as well as for woodchip drying and digestate drying processes. Each of the CHP engines vents to the atmosphere, there is a separate emergency gas flare which is available to combust the biogas should there be an emergency shutdown or maintenance.

The site lies 3.6 km south east of a Site Area of Conservation (SAC) and within 2 km of eight Local Wildlife Sites.

The schedules specify the changes made to the permit.

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

| Status log of the permit |                        |          |
|--------------------------|------------------------|----------|
| Description              | Date                   | Comments |
| Application BK5088       | Received<br>14/09/2001 |          |

| <b>Status log of the permit</b>   |  |  |
|---|--|--|
| <b>Description</b>  | <b>Date</b>  | <b>Comments</b>  |
| Permit BK5088   | Determined<br>27/06/2002                           |  |
| Transfer Application AP3836SX to wholly transfer Permit BK5088 from Holsworthy Biogas PLC to Summerleaze Ltd  | Received<br>02/06/2005<br>Determined<br>15/07/2005 |  |
| Variation Application YP3931SJ  | Received<br>15/07/2005                             | Duly Made as received 29/07/2005 as a Standard Variation.  |
| Variation Application YP3931SJ  | Determined<br>04/11/2005                           | Issued as a consolidated version of the Permit.  |
| Variation Application RP3432LP  | Received<br>25/04/2006                             | Duly Made as received 11/05/2006 as a Standard Variation.  |
| Ground Conditions Report, August 2006   | Received<br>07/08/2006                             | Submitted in response to request dated 18/07/2006.   |
| Response to request for information   | Request dated<br>18/07/2006                        | Response dated 13/09/2006.   |
| Variation Application RP3432LP  | Determined<br>15/09/2006                           | Issued as a consolidated version of the Permit.  |
| Variation Application QP3536MH  | Received<br>09/01/2007                             | Agency withdrawn 31/01/2007 as incomplete.   |
| Variation Application VP3736UL  | Received<br>11/07/2007                             | Duly Made as received 20/07/2007 as a Standard Variation.  |
| Variation Application VP3736UL  | Determined<br>30/06/2008                           | Issued as a consolidated version of the Permit.  |
| Application EPR/NP3036TM/T001 (Full transfer of permit EPR/BK5088IX) from Summerleaze Ltd to Andigestion Ltd. | Duly made<br>01/06/2010                            | Application to transfer permit.  |
| Transfer determined EPR/NP3036TM  | 02/06/2010   | Transferred permit issued to Andigestion Ltd.  |
| Variation Application EPR/NP3036TM/V002   | Received<br>07/05/2010                             | Application received to: <ul style="list-style-type: none"> <li>• Extend the site boundary</li> <li>• Installation of an additional gas engine</li> <li>• Installation of an additional digester tank (4,000 m<sup>3</sup>) and digestate storage tank (5,000 m<sup>3</sup>)</li> <li>• Reduce the frequency of the emissions to air monitoring from quarterly to annually for emissions points A2, A3 and A11</li> <li>• Remove the air emissions monitoring for emission point A9 (alligator slurry storage bag)</li> <li>• Reduce the frequency of emissions to air monitoring from quarterly to annually from emission point A6</li> </ul> |

| Status log of the permit  |                         |  |
|---|-------------------------|--|
| Description   | Date                    | Comments   |
|   |                         | <ul style="list-style-type: none"> <li>Reduce the frequency of emissions monitoring for mercaptans from quarterly to annually for emission point A7</li> <li>Amend the monitoring frequency of emission points to air from standby equipment, emission points A4 and A10.</li> <li>Removal of the requirement to perform monthly gas composition and flow monitoring from the alligator slurry storage bags</li> <li>Amend Table S2.2 defined types of waste which may be accepted to incorporate those wastes listed in the WRAP Quality Protocol for Anaerobic digestion (PAS 110)</li> <li>Addition of listed activity section 6.8 Part A(1)(c) to table S1.1.</li> </ul> |
| Variation notice<br>EPR/NP3036TM/V002                             | Issued 14/02/2011       | Varied and consolidated permit issued.   |
| Variation Application<br>EPR/NP3036TM/V003                        | Duly made<br>19/12/2011 | Application to change the previously permitted 5,000 m <sup>3</sup> digestate tank to two smaller alligator storage bags with a capacity of 3,500 m <sup>3</sup> each and construct a biodome with a capacity of 5,320 m <sup>3</sup> , in addition to extending the site boundary to accommodate two alligator storage.   |
| Variation Application<br>EPR/NP3036TM/V003                        | Issued<br>09/01/2012    | Varied permit issued.  |
| Variation Application<br>EPR/NP3036TM/V004                        | Duly made<br>25/01/2012 | Application to remove biogas and digestate maximum storage limits from Table S1.1 and the removal of the requirement for the installation or monitoring of leak detection wells for the alligator storage bags 4 and 5 from Table S3.2.  |
| Variation Application<br>EPR/NP3036TM/V004                        | Issued<br>30/01/2012    | Varied permit issued.  |
| Part surrender application<br>EPR/NP3036TM/S005                   | Duly made<br>10/08/2012 | Application to surrender engine at Harpers Home Mix and connecting biogas pipeline.  |
| Part surrender<br>EPR/NP3036TM/S005<br>determined                 | 31/10/2012              | Part surrender complete.   |
| Application<br>EPR/NP3036TM/V006<br>(variation and consolidation) | Duly made<br>10/08/2012 | Application to vary and update and consolidate the permit to modern conditions.  |
| Variation determined<br>EPR/NP3036TM/V006                         | 31/10/2012              | Varied and consolidated permit issued in modern condition format.  |
| Variation application<br>EPR/NP3036TM/V007                        | Duly made<br>08/11/2012 | Application to vary permit.  |
| Further Information received                                      | 21/12/2012              | Information regarding digestate storage lagoon construction.   |
| Further Information received                                      | 08/01/2013              | Information regarding digestate storage lagoon construction.   |

| <b>Status log of the permit</b>  |  |   |
|--|--|---|
| <b>Description</b>   | <b>Date</b>                                  | <b>Comments</b>   |
| Further Information received   | 11/01/2013                                   | Information regarding digestate storage lagoon construction.  |
| Further Information received   | 14/01/2013                                   | Information regarding post digester specifications.   |
| Variation determined<br>EPR/NP3036TM/V007  | 07/02/2013                                   | Varied and consolidated permit issued.  |
| Environment Agency initiated<br>variation EPR/NP3036TM/V008                              | Approved<br>03/06/2013                       | Correction of monitoring frequencies for carbon monoxide, oxides of nitrogen and mercaptans.  |
| Variation determined<br>EPR/NP3036TM/V008  | 18/06/2013                                   | Varied permit issued.   |
| Application<br>EPR/NP3036TM/V009 (variation<br>and consolidation)                        | Duly made<br>10/07/2015                      | Application to add a waste operation for physico-chemical treatment of digestate and slurry, extend the permit boundary and amend the monitoring requirements for the biogas plant's thermal oxidiser.  |
| Additional information received  | 27/08/2015                                   | Proposal to install a separation plant and an additional dryer.   |
| Response to Schedule 5 request<br>for information  | 14/09/2015                                   | Revised odour management plan, site plan showing agreed sniff points and site plan showing additional air emission points.  |
| Additional information received  | 14/09/2015                                   | Request for addition of waste codes for treatment by anaerobic digestion.   |
| Variation determined<br>EPR/NP3036TM/V009  | 03/11/2015                                   | Varied and consolidated permit issued.  |
| Regulation 61 Notice sent to<br>Operator   | 19/07/2019                                   | Regulation 61 Notice requiring information for statutory review of permit.  |
| Regulation 61 Notice response  | 17/01/2020                                   | Response received from the operator.  |
| Application<br>EPR/NP3036TM/V010 (variation<br>and consolidation)                        | Duly made<br>23/01/2020                      | Variation for the following changes on site: <ul style="list-style-type: none"> <li>• Replacement of an existing CHP unit with a newer model of the same size and specification</li> <li>• The use of a new reception hall for the tipping of the waste wheelie bin</li> <li>• The addition of two boreholes for the monitoring of groundwater and revision of the groundwater monitoring requirements</li> </ul> |
| Additional information received in<br>response to Schedule 5 Notice,<br>dated 25/03/2020 | Received<br>13/05/2020                       | <ul style="list-style-type: none"> <li>• Revised odour management plan</li> <li>• Details and justification regarding the new odour abatement system for the wheelie bin processing building</li> </ul>   |
| Additional information received  | 20/07/2020                                   | Updated odour management plan   |
| Application<br>EPR/NP3036TM/V011<br>(variation and consolidation)                        | Environment<br>Agency Initiated<br>Variation | Statutory review of permit occasioned by Waste Treatment BAT Conclusions published on 17 August 2018.   |
| Environment Agency Biowaste<br>Treatment Sector Review<br>Permit reviewed                | 14/10/2020                                   | Varied and consolidated permit issued.  |

| <b>Status log of the permit</b>                                 |             |                 |
|---|-------------|-----------------|
| <b>Description</b>  | <b>Date</b> | <b>Comments</b> |
| Variation determined<br>EPR/NP3036TM<br>(Billing Ref: XP3406BB) |             |                 |

End of introductory note

# Notice of variation and consolidation

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

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies and consolidates

### Permit number

EPR/NP3036TM

### Issued to

**Andigestion Limited** (“the operator”)

whose registered office is

**7 Summerleaze Road**

**Maidenhead**

**Berkshire**

**SL6 8SP**

company registration number **01847506**

to operate a regulated facility at

**Holsworthy Biogas Plant**

**Chilsworthy**

**Holsworthy**

**Devon**

**EX22 7HH**

to the extent set out in the schedules.

The notice shall take effect from 14/10/2020.

| Name        | Date       |
|-------------|------------|
| Louise Hann | 14/10/2020 |

Authorised on behalf of the Environment Agency



## **Schedule 1**

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation.

## **Schedule 2 – consolidated permit**

Consolidated permit issued as a separate document.

# Permit

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

### Permit number

**EPR/NP3036TM**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/NP3036TM/V011 authorising,

**Andigestion Limited** (“the operator”),

whose registered office is

**7 Summerleaze Road**

**Maidenhead**

**Berkshire**

**SL6 8SP**

company registration number **01847506**

to operate an installation and waste operation at

**Holsworthy Biogas Plant**

**Chilsworthy**

**Holsworthy**

**Devon**

**EX22 7HH**

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

| Name        | Date       |
|-------------|------------|
| Louise Hann | 14/10/2020 |

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 For the following activities referenced in schedule 1, table S1.1 AR1 to AR10, 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 For the following activities referenced in schedule 1, table S1.1 AR1 to AR10, 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 For the following activities referenced in schedule 1, table S1.1 AR1 to AR10, the activities shall be undertaken in accordance with best available techniques.
- 2.1.3 All process plant and equipment shall be commissioned, operated and maintained and shall be fully documented and recorded in accordance with the manufacturer’s recommendations.
- 2.1.4 For the following activities referenced in schedule 1, table S1.1 AR1 to AR10, 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 tables S2.2 and S2.3; and
  - (b) it conforms to the description in the documentation supplied by the producer and holder.
  - (c) the facility has sufficient free capacity to store and treat the waste.
- 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.
- 2.3.7 For the following activities referenced in schedule 1, table S1.1 AR1 to AR10, waste pre-acceptance and acceptance procedures shall be undertaken in accordance with best available techniques.
- 2.3.8 For the following activities referenced in schedule 1, table S1.1 AR4:
- (a) each MCP must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this.
  - (b) the operator must keep periods of start-up and shut-down of each MCP as short as possible.
  - (c) there must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993.

## **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 and S3.3.
- 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.
- 3.2.4 The operator shall implement a leak detection and repair (LDAR) programme to detect and mitigate the release of volatile organic compounds, including methane from diffuse sources.

### **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 Monitoring**

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1, S3.2 and S3.3;
  - (b) process monitoring specified in table S3.4.
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2, S3.3 unless otherwise agreed in writing by the Environment Agency.
- 3.5.5 In the case of new medium combustion plant, the first monitoring measurements shall be carried out within four months of the issue date of the permit or the date when the MCP is first put into operation, whichever is later.
- 3.5.6 Monitoring shall not take place during periods of start-up or shut-down.

### **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) only use approved products for pest control;
- (b) treat pest infestations promptly;
- (c) reject pest-infected incoming waste;
- (d) 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;
- (e) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

### **3.7 Fire prevention**

3.7.1 The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.

3.7.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
- (b) implement the fire prevention 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 For the following activities referenced in schedule 1, table S1.1 AR1 to AR10, 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.
- 4.2.6 The operator shall keep records of non-waste materials leaving the site, including the type of material, the batch number, the date of export off-site and the tonnage exported on that date. These records shall be maintained for at least 2 years.

### 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 Following the detection of an issue listed in condition 4.3.1, the operator shall review and revise the management system and implement any changes as necessary to minimise the risk of reoccurrence of the issue.
- 4.3.4 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.
- 4.3.5 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.
- 4.3.6 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.
- 4.3.7 The Environment Agency shall be given at least 14 days' notice before implementation of any part of the site closure plan.
- 4.3.8 The operator shall notify the Environment Agency as soon as is practicable, in writing of any change of the medium combustion plant.

## **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                                 | S6.8 A(1) (c)<br>Disposing of or recycling of animal carcasses or animal waste, other than by rendering or by incineration at a plant with a treatment capacity exceeding 10 tonnes per day of animal carcasses or animal wastes or both in aggregate. | 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).<br><br>Anaerobic digestion of waste in 4 tanks followed by burning of biogas produced from the process.<br><br>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) | From the receipt of permitted waste to pre-treatment and despatch for anaerobic digestion on site.<br><br>Storage of residual wastes from pre-treatment to despatch off-site for recovery.<br><br>Storage of waste in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with a sealed drainage system.<br><br>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  | From the receipt of waste to despatch for anaerobic digestion or despatch off site for recovery.<br><br>Pre-treatment of waste in enclosed building and on impermeable surface with a sealed drainage system including shredding, sorting, screening, compaction,  |

| <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>baling, mixing and maceration.</p> <p>Post-treatment of digestate in an enclosed building and on an impermeable surface with a sealed drainage system, including screening to remove contraries, centrifuge or pressing and addition of thickening agents (polymers) or drying for use as a fertiliser or soil conditioner (drying for the purpose of use as a fuel is not permitted).</p> <p>Heat treatment (pasteurisation) of waste in 3 tanks for the purpose of recovery.</p> <p>Gas cleaning by biological or physical (carbon filtration) 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>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 6 combined heat and power (CHP) engines with an aggregated thermal input of 14.8 MWth.</p> <p>Combustion of biogas in one auxiliary boiler with a thermal input of 0.57 MWth.</p>  |
| AR5                          | Emergency flare operation                                  | D10: Incineration on land  | From the receipt of biogas produced at the on-site anaerobic digestion process to incineration with the   |

| <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>  |
|                              |  |  | release of combustion gases.<br><br>Use of 1 auxiliary flare required only during periods of breakdown or maintenance of the CHP engines.  |
| AR6                          | Air treatment  | Collection and treatment of air from the buildings or plant using abatement system (thermal oxidiser and carbon filter) prior to release to atmosphere.    | From the collection of air from site processes to treatment and release of treated air to atmosphere.  |
| AR7                          | Raw material storage                                       | Storage of raw materials including lubrication oil, antifreeze, propane, ferric chloride, activated carbon, diesel.  | From the receipt of raw materials to despatch for use within the facility.   |
| AR8                          | Gas 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) | Storage of biogas produced from on-site anaerobic digestion of permitted waste in 3 stand-alone tanks or roof space of digesters.<br><br>From the receipt of biogas produced at the on-site anaerobic digestion process to despatch for use within the facility. |
| AR9                          | 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) | From the receipt of processed uncertified digestate produced from the on-site anaerobic digestion process to despatch for use off-site.<br><br>Storage of processed uncertified liquid digestate in 1 storage tank, 5 alligator slurry bags and 3 lagoons        |
| AR10                         | Surface water collection and storage                       | Collection and storage of uncontaminated roof and site surface water in 1 storage tank.  | From the collection of uncontaminated roof and site surface water from non-operational areas only to re-use within the facility or discharge off-site.   |
| <b>Activity reference</b>    | <b>Description of activities for waste operations</b>      |  | <b>Limits of activities</b>  |
| AR11                         | Bio-drying plant   |  | Treatment operations shall be limited to bio-drying for the purpose of recovery.   |

| <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>R3: Recycling/reclamation of organic substances which are not used as solvents</p> <p>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)</p> | <p>Drying of wastes specified for the purpose of use as a fuel is not permitted at this facility.</p> <p>Slurry and digestate will be stored and treated separately from each other.</p> <p>Waste types as specified in Table 2.3.</p> |   |

| <b>Table S1.2 Operating techniques</b>                                    |   |                                       |
|---|---|---------------------------------------|
| <b>Description</b>  | <b>Parts</b>  | <b>Date Received</b>                  |
| Application   | The response to question 2.1 given in section BK5088/1/8 of the application.  | 04/09/2001                            |
| Response to Schedule 4 Part 1 Notice                                      | Response to questions 2.1, 2.2, 2.3 and 2.4.  | 29/10/2001 to 25/01/2002              |
| Variation Application YP3931SJ  | The response to questions C1.2, C1.4 and C2.1 given in section VAR1.BK5088/1, 2 and 3 of the Variation Application.   | 15/07/2005                            |
| Response to Schedule 7 Part 1 Notice                                      | Response to questions 1.1, 1.2, 2.1 and 3.1.  | 03/10/2005                            |
| Variation Application RP3432LP  | The response to questions C1.2, C1.3, C1.4 and C2.1, C2.2, C2.3 given in Document D1 section 1.1, 1.3 and 1.5 and Document D2 of the Variation Application. Document D1 (April 2006, Project Ref: 17227/003), Document D2 (April 2006 (April 2006, Project Ref: 17227/003/CBH). The Ground Conditions Report, August 2006 (Project Ref: 17227/001/EXE/DA/LT/) of the Variation Application. The response to the request for further information dated 18/07/2006. | 25/04/2006, 07/08/2006 and 13/09/2006 |
| Variation Application VP3736UL  | The response to questions C1.2, C1.3 and C2.1, C2.2, C2.3 given in Report on Proposed Changes to Summerleaze An-Digestion Holsworthy of the Variation Application (June 2007, Report Ref: 07514190057.500, Golder Associates).  | 11/07/2007                            |
| Response to Schedule 7 Part 1 Notice for Variation Application VP3736UL   | Response to questions 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11.   | 21/09/2007                            |
| Variation Application EPR/NP3036TM/V002                                   | Documents D2(1), D2(2), D2(3), D2(4), D2(5), D2(6), D2(7) and associated appendices of the variation application.   | 07/05/2010                            |
| Variation Application EPR/NP3036TM/V003                                   | Documents C2.1, C2.12, C2.6, C3.3 and associated appendices C2.13, C2.14, C2.15 and C2.16 in support of the variation application.  | 01/12/2011                            |
| Variation application EPR/NP3036TM/V006                                   | Document C2.1, C3.3b.1 and C3.3b.2.   | 10/08/2012                            |
| Variation application EPR/NP3036TM/V007                                   | Document C2.2a.1, C2.2a.3 and C2.2a.4.  | 08/11/2012                            |
| Response to Schedule 5 Notice for Variation application EPR/NP3036TM/V007 | Document CQA - HPB Lagoon-001 regarding specification and construction of lagoons and email regarding lagoon permeability and construction dated 08/01/2012 and email regarding permeability of lagoons dated 11/01/2013.   | 21/12/2012, 08/01/2013 and 11/01/2013 |

|  |   |                         |
|--|---|-------------------------|
| Variation application<br>EPR/NP3036TM/V009   | Responses to Parts C2, C3 and C4 of the application form and all supporting documentation.  | 17/04/2015              |
| Response to Schedule 5 request for information for Variation application EPR/NP3036TM/V009 | Revised odour management plan, site plan showing agreed sniff points and site plan showing additional air emission points.  | 14/09/2015              |
| Response to Regulation 61 Notice dated 19/07/2019  | <ul style="list-style-type: none"> <li>Annex 1 Returns Spreadsheet</li> <li>Compliance and operating techniques identified in response to BAT Conclusions 1 to 8, 10 to 24 and 33 to 38 in the Waste Treatment BREF published on 17 August 2018.</li> </ul> | Received<br>17/01/2020  |
| Variation application<br>EPR/NP3036TM/V010   | <p>Application Forms Parts C2 and C3</p> <p>The following sections of the application supporting information:</p> <ul style="list-style-type: none"> <li>Supporting Information (all sections)</li> </ul>   | Duly Made<br>23/01/2020 |
| Response to Schedule 5 request for information for Variation application EPR/NP3036TM/V010 | <ul style="list-style-type: none"> <li>Revised odour management plan</li> <li>Details and justification regarding the new odour abatement system for the wheelie bin processing building</li> </ul>   | 13/05/2020              |
| Additional information received  | Revised odour management plan   | 20/07/2020              |

| <b>Table S1.3 Improvement programme requirements</b>                 |   |   |
|--|---|---|
| <b>Reference</b>   | <b>Requirement</b>  | <b>Date</b>   |
| IC 9.1 to 9.26   | Improvement conditions from previous variations.  | Complete  |
| <b>Improvement condition for progress report to achieve BAT-AELs</b> |   |   |
| 9.27   | <p>The operator shall submit, for approval by the Environment Agency, a report setting out progress to achieving the Best Available Techniques Conclusion Associated Emission Levels (BAT-AELs) where BAT is currently not achieved, but will be achieved before 17 August 2022. The report shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> <li>1) Current performance against the BAT-AELs.</li> <li>2) Methodology for reaching the BAT-AELs.</li> <li>3) Associated targets /timelines for reaching compliance by 17 August 2022.</li> <li>4) Any alterations to the initial plan (in progress reports).</li> </ol> <p>The report shall address the BAT Conclusions for Waste Treatment with respect to the following:</p> <ul style="list-style-type: none"> <li>• <b>BAT 34 Table 6.7</b> (compliance with BAT-AELs for channelled NH<sub>3</sub>, odour, dust and TVOC emissions to air from the biological treatment of waste)</li> </ul> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p> | <p>Progress reports at six monthly intervals from date of permit issue:</p> <p>14/04/2021<br/>14/10/2021<br/>14/04/2022</p> |

| <b>Table S1.3 Improvement programme requirements</b>                           |  |   |
|--|--|---|
| <b>Reference</b>   | <b>Requirement</b>   | <b>Date</b>   |
| <b>Improvement condition for progress report to achieve Narrative BAT</b>      |  |   |
| 9.28   | <p>The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving the 'Narrative' BAT where BAT is currently not achieved, but will be achieved before 17 August 2022. The report shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> <li>1) Methodology for achieving BAT</li> <li>2) Associated targets /timelines for reaching compliance by 17 August 2022</li> <li>3) Any alterations to the initial plan (in progress reports).</li> </ol> <p>The report shall address the BAT Conclusions for Waste Treatment with respect to BATc 3, 14, 23 and 38.</p> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>  | <p>Progress reports at six monthly intervals from date of permit issue:</p> <p>14/04/2021<br/>14/10/2021<br/>14/04/2022</p> |
| <b>Improvement condition for lagoon cover and operational storage capacity</b> |  |   |
| 9.29   | <p>The operator shall provide a written "digestate storage plan" and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review of the current storage of digestate produced from site operations. The review shall examine site contingency arrangements in the event of closed landspreading periods, extreme weather conditions, site closure, disease outbreak etc.</p> <p>The storage plan shall include:</p> <ul style="list-style-type: none"> <li>• Existing cover arrangements on storage lagoons used to store digestate to minimise odour, ammonia and methane emissions;</li> <li>• Additional storage capacity on-site (at least 2 months storage) and storage capacity off-site;</li> <li>• Identification of alternative outlets for digestate – identify companies /permitted waste facilities that would be able to manage the digestate and/or liquor output(s), taking into account their permits and capacity constraints.</li> </ul> <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p> | 14/10/2021  |
| <b>Improvement condition for primary containment</b>                           |  |   |
| 9.30   | <p>The operator shall submit a written 'primary containment plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review conducted, by a competent person, and shall compare the design specification of primary containment systems where all polluting liquids and solids are being stored, treated, and/or handled against the design standards within CIRIA C535 guidance or equivalent.</p> <p>The review shall include:</p> <ul style="list-style-type: none"> <li>• physical condition of all primary containment systems (storage and treatment vessels);</li> </ul>   | 14/10/2021  |



| <b>Table S1.3 Improvement programme requirements</b>          |   |             |
|---|---|-------------|
| <b>Reference</b>  | <b>Requirement</b>  | <b>Date</b> |
|   | <ul style="list-style-type: none"> <li>the suitability for providing primary containment when subjected to the dynamic and static loads caused by the vessels' contents;</li> <li>any work required to ensure compliance with the standards set out in CIRIA C535 or equivalent; and</li> <li>a preventative maintenance and inspection regime</li> </ul> <p>The plan must contain dates for the implementation of individual improvement measures necessary for the primary containment to adhere to the standards detailed/referenced within CIRIA C535 guidance, or equivalent.</p> <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p>   |             |
| <b>Improvement condition for secondary containment design</b> |   |             |
| 9.31  | <p>The operator shall submit a written 'secondary and tertiary containment plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review conducted, by a competent person, in accordance with the risk assessment methodology detailed within CIRIA C736 (2014) guidance, of the condition and extent of secondary and tertiary containment systems where all polluting liquids and solids are being stored, treated, and/or handled.</p> <p>The review shall consider, but not limited to, the storage vessels, bunds, loading and unloading areas, transfer pipework/pumps, temporary storage areas, and liners underlying the site.</p> <p>The plan must contain dates for the implementation of individual improvement measures necessary for the secondary and tertiary containment systems to adhere to the standards detailed/referenced within CIRIA C736 (2014) guidance, or equivalent.</p> <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p> | 14/10/2021  |
| <b>Improvement condition for storage lagoon design</b>        |   |             |
| 9.32  | <p>The operator shall submit a written 'storage lagoon plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review conducted, by a competent person, in accordance with the risk assessment methodology detailed within CIRIA C736 (2014) guidance, of the condition and extent of the site lagoon(s) where digestate or compost leachate are being stored, treated, and/or handled.</p> <p>The review shall consider, but not limited to, the lagoon cover, transfer pipework/pumps, and liners underlying the storage lagoon.</p> <p>The plan must contain dates for the implementation of individual improvement measures necessary for the storage lagoon to adhere to the standards detailed/referenced CIRIA C736 (2014) guidance, or equivalent.</p> <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p>   | 14/10/2021  |

| <b>Table S1.3 Improvement programme requirements</b>  |  |   |
|---|--|---|
| <b>Reference</b>  | <b>Requirement</b>   | <b>Date</b>   |
| <b>Improvement condition for review of the effectiveness of the wheelie bin reception hall odour abatement system</b> |  |   |
| 9.33  | <p>The operator shall carry out a review of the wheelie bin reception hall odour abatement system in order to determine whether the system has been effective in minimising odorous emissions.</p> <p>The operator shall submit a written report to the Environment Agency following this review for written approval. This report shall be undertaken in accordance with the odour management plan and outline the following.</p> <ul style="list-style-type: none"> <li>• Odour monitoring results at the site boundary</li> <li>• Odour monitoring at the external locations, as previously agreed by the Environment Agency.</li> <li>• At least three inlet and outlet monitoring results for all odorous compounds taken during full operation</li> <li>• Demonstrate that all monitoring results are not benefitted by the abatement media being recently changed</li> <li>• Process operation monitoring results</li> <li>• Recommendations for improvement</li> </ul> <p>The report shall assess and conclude whether or not the odour abatement system and the stated air changes per hour are effective in reducing odour emissions from the site and identify any improvements to the management technique.</p> <p>Where odour is detected at the boundary of the site or other improvements can be made, the report shall include timescales for implementation of improvements to the abatement system for agreement with the Environment Agency.</p> <p>The operator shall implement the improvements in line with the timescales agreed with the Environment Agency.</p> | 14/10/2021  |
| <b>Improvement condition for review of effectiveness of abatement plant</b>   |  |   |
| 9.34  | <p>The operator shall carry out a review of the abatement plant on site, in order to determine whether the measures have been effective and adequate to prevent and where not possible minimise emissions released to air including but not limited to odour and ammonia.</p> <p>The operator shall submit a written report to the Environment Agency following this review for assessment and approval.</p> <p>The report shall include but not limited to the following aspects:</p> <ul style="list-style-type: none"> <li>• Full investigation and characterisation of the waste gas streams.</li> <li>• Abatement stack monitoring results (not limited to odour and ammonia)</li> <li>• Abatement process monitoring results (not limited to odour and ammonia)</li> </ul>   | <p>12 months from date of permit issue.</p> <p>14/10/2021</p> |

| <b>Table S1.3 Improvement programme requirements</b> |  |             |
|--|--|-------------|
| <b>Reference</b>                                     | <b>Requirement</b>   | <b>Date</b> |
|  | <ul style="list-style-type: none"> <li>• Odour monitoring results at the site boundary</li> <li>• Records of odour complaints and odour related incidents</li> <li>• Recommendations for improvement including the replacement or upgrading the abatement plant</li> <li>• Timescales for implementation of improvements to the abatement plant</li> </ul> <p>The operator shall implement the improvements in line with the timescales as approved by the Environment Agency.</p> |             |

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

| Raw materials and fuel description | Specification               |
|------------------------------------|-----------------------------|
| Fuel oil                           | Sulphur content ≤ 0.05% w/w |

| Maximum quantity | Annual throughput shall not exceed 160,000 tonnes where the food/organic processing waste component shall not exceed 80,000 tonnes in any year.  |
|------------------|--|
| Exclusions       | <p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> <li>separately collected loads of plastic unless the whole load is certified compostable to BS EN13432</li> <li>co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432</li> <li>food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025.</li> <li>wastes containing wood-preserving agents or other biocides and post-consumer wood</li> <li>wastes containing persistent organic pollutants</li> <li>wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014</li> <li>manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.</li> </ul> |
| 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   |
| <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  |
| <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   |

| <b>Table S2.2 Permitted waste types and quantities for anaerobic digestion</b> |  |
|--|--|
| <b>Maximum quantity</b>  | <b>Annual throughput shall not exceed 160,000 tonnes where the food/organic processing waste component shall not exceed 80,000 tonnes in any year.</b>   |
| <b>Exclusions</b>  | <p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> <li>• separately collected loads of plastic unless the whole load is certified compostable to BS EN13432</li> <li>• co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432</li> <li>• food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025.</li> <li>• wastes containing wood-preserving agents or other biocides and post-consumer wood</li> <li>• wastes containing persistent organic pollutants</li> <li>• wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014</li> <li>• manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.</li> </ul> |
| <b>Waste code</b>  | <b>Description</b>   |
| 02 03 04   | materials unsuitable for consumption or processing   |
| 02 03 05   | sludges from on-site effluent treatment  |
| <b>02 04</b>   | <b>wastes from sugar processing</b>  |
| 02 04 03   | sludges from on-site effluent treatment  |
| <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>   |
| 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 05   | sludges from on-site effluent treatment  |
| <b>04</b>  | <b>Wastes from the leather, fur and textile industries</b>   |
| <b>04 02</b>   | <b>wastes from the textile industry</b>  |
| 04 02 10   | organic matter from natural products, e.g. grease, wax   |
| <b>07</b>  | <b>Wastes from organic chemical processes</b>  |
| <b>07 01</b>   | <b>wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals</b>  |
| 07 01 08*  | glycerol waste from bio-diesel manufacture from non-waste vegetable oils only  |
| <b>15</b>  | <b>Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified</b>  |

| <b>Table S2.2 Permitted waste types and quantities for anaerobic digestion</b> |  |
|--|--|
| <b>Maximum quantity</b>  | <b>Annual throughput shall not exceed 160,000 tonnes where the food/organic processing waste component shall not exceed 80,000 tonnes in any year.</b>   |
| <b>Exclusions</b>  | <p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> <li>separately collected loads of plastic unless the whole load is certified compostable to BS EN13432</li> <li>co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432</li> <li>food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025.</li> <li>wastes containing wood-preserving agents or other biocides and post-consumer wood</li> <li>wastes containing persistent organic pollutants</li> <li>wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014</li> <li>manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.</li> </ul> |
| <b>Waste code</b>  | <b>Description</b>   |
| <b>15 01</b>   | <b>packaging (including separately collected municipal packaging waste)</b>  |
| 15 01 01   | paper and cardboard packaging – excludes laminates such as Tetrapaks and must conform to BS EN 13432 and not allowed if any non-biodegradable coating or preserving substance is present   |
| 15 01 02   | biodegradable plastic packaging – must conform to BS EN 13432 and not allowed if any non-biodegradable coating or preserving substance is present  |
| 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>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 06   | sludge types from waste listed within this table, Table S2.2, that have been heat treated only   |
| <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)  |

| <b>Table S2.2 Permitted waste types and quantities for anaerobic digestion</b> |  |
|--|--|
| <b>Maximum quantity</b>  | <b>Annual throughput shall not exceed 160,000 tonnes where the food/organic processing waste component shall not exceed 80,000 tonnes in any year.</b>   |
| <b>Exclusions</b>  | <p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> <li>• separately collected loads of plastic unless the whole load is certified compostable to BS EN13432</li> <li>• co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432</li> <li>• food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025.</li> <li>• wastes containing wood-preserving agents or other biocides and post-consumer wood</li> <li>• wastes containing persistent organic pollutants</li> <li>• wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014</li> <li>• manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.</li> </ul> |
| <b>Waste code</b>  | <b>Description</b>   |
| 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 (from a process that treats wastes which are listed in this table only).   |
| <b>19 12</b>   | <b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>  |
| 19 12 12   | waste types listed in this table, Table S2.2, that have been subjected to mechanical treatment only (from a process that treats wastes which are listed in this table only).   |
| <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 packaging – excludes laminates such as Tetrapaks and must conform to BS EN 13432 and not allowed if any non-biodegradable coating or preserving substance is present.  |
| 20 01 08   | biodegradable kitchen and canteen waste  |
| 20 01 25   | edible oil and fat   |
| <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   |

| <b>Table S2.3 Permitted waste types and quantities for treatment by bio-drying</b> |  |
|--|--|
| <b>Maximum quantity</b>  | <b>Annual throughput shall not exceed 9500 tonnes.</b>   |
| <b>Waste code</b>  | <b>Description</b>   |
| <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 06   | animal faeces, urine and manure including spoiled straw  |
| <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>19 06</b>   | <b>wastes from anaerobic treatment of waste</b>  |
| 19 06 04   | digestate from anaerobic treatment of source segregated biodegradable waste (from a process that treats wastes which are listed in Table S2.2 only)                            |
| 19 06 06   | digestate from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in Table S2.2 only)                                       |



## 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 (incl. unit)                | Reference period           | Monitoring frequency | Monitoring standard or method   |
| A1 [Point A1 on site plan in Schedule 7]   | Emergency flare stack<br>[note 1]             | Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> ) | 150 mg/m <sup>3</sup>             | Average over sample period | [note 2]             | 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   |
| A2 [Point A2 on site plan in Schedule 7]   | CHP biogas engine 1 stack<br>[note 3]         | Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> ) | 500 mg/m <sup>3</sup>             | Average over sample period | Annual               | BS EN 14792   |
|  |   | Sulphur dioxide   | 350 mg/m <sup>3</sup><br>[note 4] |                            |                      | BS EN 14791<br>or<br>CEN TS 17021<br>or<br>by calculation based on fuel sulphur |
|  |   | Sulphur dioxide   | 162 mg/m <sup>3</sup><br>[note 5] |                            |                      |   |
|  |   | Carbon monoxide   | 1400 mg/m <sup>3</sup>            |                            |                      | BS EN 15058   |
|  |   | Total VOCs  | No limit set                      |                            |                      | BS EN 12619   |
| A3 [Point A3 on site plan in Schedule 7]   | CHP biogas engine 2 (8) stack<br>[note 1]     | Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> ) | 500 mg/m <sup>3</sup>             | Average over sample period | Annual               | BS EN 14792   |
|  |   | Sulphur dioxide   | 107 mg/m <sup>3</sup>             |                            |                      | BS EN 14791<br>or<br>CEN TS 17021<br>or<br>by calculation based on fuel sulphur |
|  |   | Carbon monoxide   | 1400 mg/m <sup>3</sup>            |                            |                      | BS EN 15058   |
|  |   | Total VOCs  | No limit set                      |                            |                      | BS EN 12619   |
| A4 [Point A4 on site plan in Schedule 7]   | Standby boiler stack (dual fuel / oil boiler) | No parameter set  | No limit set                      | --                         | --                   | --  |

| <b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b> |  |   |                           |                            |                             |   |              |
|---|--|---|---------------------------|----------------------------|-----------------------------|---|--------------|
| <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>  |              |
| A5 [Point A5 on site plan in Schedule 7]  | Channelled emissions from carbon filter for main reception building                      | Hydrogen sulphide   | No limit set              | Average over sample period | Once every 6 months         | CEN TS 13649 for sampling<br><br>NIOSH 6013 for analysis  |              |
|   |  | Ammonia   | 20 mg/m <sup>3</sup>      | Average over sample period | Once every 6 months         | EN ISO 21877  |              |
|   |  | Odour concentration   | No limit set              | --                         | Once every 6 months         | BS EN 13725   |              |
| A6 [Point A6 on site plan in Schedule 7]  | Channelled emissions from tanker loading operations when loading from rigid storage tank | No parameter set  | --                        | --                         | --                          | -   |              |
| A7 [Point A7 on site plan in Schedule 7]  | Channelled emissions from thermal oxidiser stack on main reception building [note 6]     | Non-methane VOCs  | 3                         | Average over sample period | Quarterly                   | In accordance with Environment Agency guidance, Monitoring stack emissions: environmental permits |              |
|   |  | Hydrogen sulphide   | 0.5                       |                            |                             |   |              |
|   |  | Carbon monoxide   | 100                       |                            | Annually                    |   |              |
|   |  | Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> ) | 20                        |                            |                             |   |              |
|   |  | Total mercaptans (as methyl mercaptan)                                    | 0.5                       |                            |                             |   |              |
|   |  | Ammonia   | 20 mg/m <sup>3</sup>      | Average over sample period | Once every 6 months         |   | EN ISO 21877 |
|   |  | Odour concentration   | No limit set              | --                         | Once every 6 months         |   | BS EN 13725  |

**Table S3.1 Point source emissions to air – emission limits and monitoring requirements**

| <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>                                |
|---|--|---|--------------------------------|---------------------------------|-----------------------------|---|
| A8 (Note: A8 is a generic reference - individual pressure relief valves are not referenced on the site plans) | All pressure relief valves installed at the plant for emissions to air                                     | Biogas release and operational events                                     | No limit set                   | Recorded duration and frequency | Daily inspection            | --  |
| A9 [Point A9 on site plan in Schedule 7]  | Outlet from Alligator Slurry Storage Bags  | No parameter set  | No limit set                   | --                              | --                          | --  |
| A10 [Point A10 on site plan in Schedule 7]  | Channelled emissions from tanker loading operations when loading direct from Alligator slurry storage bags | No parameter set  | No limit set                   | --                              | --                          | --  |
| A11 [Point A11 on site plan in Schedule 7]  | CHP biogas engine 3 stack [note 3]   | Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> ) | 500 mg/m <sup>3</sup>          | Average over sample period      | Annual                      | BS EN 14792   |
|   |  | Sulphur dioxide   | 350 mg/m <sup>3</sup> [note 4] |                                 |                             | BS EN 14791 or CEN TS 17021 or by calculation based on fuel sulphur |
|   |  | Sulphur dioxide   | 162 mg/m <sup>3</sup> [note 5] |                                 |                             |   |
|   |  | Carbon monoxide   | 1400 mg/m <sup>3</sup>         |                                 |                             | BS EN 15058   |
|   |  | Total VOCs  | No limit set                   |                                 |                             | BS EN 12619   |
| A14 [Point A14 on site plan in Schedule 7]  | CHP biogas engine 4 stack [note 3]   | Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> ) | 500 mg/m <sup>3</sup>          | Average over sample period      | Annual                      | BS EN 14792   |
|   |  | Sulphur dioxide   | 350 mg/m <sup>3</sup> [note 4] |                                 |                             | BS EN 14791 or CEN TS 17021 or by calculation based on fuel sulphur |
|   |  | Sulphur dioxide   | 162 mg/m <sup>3</sup> [note 5] |                                 |                             |   |
|   |  | Carbon monoxide   | 1400 mg/m <sup>3</sup>         |                                 |                             | BS EN 15058   |

| <b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b> |                                    |   |                                |                            |                             |   |
|---|------------------------------------|---|--------------------------------|----------------------------|-----------------------------|---|
| <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>                                |
|   |                                    | Total VOCs  | No limit set                   |                            |                             | BS EN 12619   |
| A15 [Point A15 on site plan in Schedule 7]  | CHP biogas engine 5 stack [note 3] | Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> ) | 500 mg/m <sup>3</sup>          | Average over sample period | Annual                      | BS EN 14792   |
|   |                                    | Sulphur dioxide   | 350 mg/m <sup>3</sup> [note 4] |                            |                             | BS EN 14791 or CEN TS 17021 or by calculation based on fuel sulphur |
|   |                                    | Sulphur dioxide   | 162 mg/m <sup>3</sup> [note 5] |                            |                             |   |
|   |                                    | Carbon monoxide   | 1400 mg/m <sup>3</sup>         |                            |                             | BS EN 15058   |
|   |                                    | Total VOCs  | No limit set                   |                            |                             | BS EN 12619   |
| A16 [Point A16 on site plan in Schedule 7]  | CHP biogas engine 6 stack [note 3] | Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> ) | 500 mg/m <sup>3</sup>          | Average over sample period | Annual                      | BS EN 14792   |
|   |                                    | Sulphur dioxide   | 350 mg/m <sup>3</sup> [note 4] |                            |                             | BS EN 14791 or CEN TS 17021 or by calculation based on fuel sulphur |
|   |                                    | Sulphur dioxide   | 162 mg/m <sup>3</sup> [note 5] |                            |                             |   |
|   |                                    | Carbon monoxide   | 1400 mg/m <sup>3</sup>         |                            |                             | BS EN 15058   |
|   |                                    | Total VOCs  | No limit set                   |                            |                             | BS EN 12619   |

**Table S3.1 Point source emissions to air – emission limits and monitoring requirements**

| <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>  |
|--|---|--|---------------------------|----------------------------|-----------------------------|---|
| A17 [Point A17 on site plan in Schedule 7] | Dryer Stack 1   | Ammonia (NH <sub>3</sub> )                   | 10 mg/m <sup>3</sup>      | Average over sample period | Annual                      | In accordance with Environment Agency guidance, Monitoring stack emissions: environmental permits |
|  |   | Total particulate matter (PM <sub>10</sub> ) | 20 mg/m <sup>3</sup>      |                            |                             |   |
| A18 [Point A18 on site plan in Schedule 7] | Dryer Stack 2   | Ammonia (NH <sub>3</sub> )                   | 10 mg/m <sup>3</sup>      | Average over sample period | Annual                      | In accordance with Environment Agency guidance, Monitoring stack emissions: environmental permits |
|  |   | Total particulate matter (PM <sub>10</sub> ) | 20 mg/m <sup>3</sup>      |                            |                             |   |
| A19 [Point A19 on site plan in Schedule 7] | Dryer Stack 3   | Ammonia (NH <sub>3</sub> )                   | 10 mg/m <sup>3</sup>      | Average over sample period | Annual                      | In accordance with Environment Agency guidance, Monitoring stack emissions: environmental permits |
|  |   | Total particulate matter (PM <sub>10</sub> ) | 20 mg/m <sup>3</sup>      |                            |                             |   |
| A20 [Point A20 on site plan in Schedule 7] | Dryer Stack 4   | Ammonia (NH <sub>3</sub> )                   | 10 mg/m <sup>3</sup>      | Average over sample period | Annual                      | In accordance with Environment Agency guidance, Monitoring stack emissions: environmental permits |
|  |   | Total particulate matter (PM <sub>10</sub> ) | 20 mg/m <sup>3</sup>      |                            |                             |   |
| A21 [Point A21 on site plan in Schedule 7] | Channelled emissions from carbon filter on wheelie bin reception building | Hydrogen sulphide                            | No limit set              | Average over sample period | Once every 6 months         | CEN TS 13649 for sampling<br><br>NIOSH 6013 for analysis  |
|  |   | Ammonia                                      | 20 mg/m <sup>3</sup>      | Average over sample period | Once every 6 months         | EN ISO 21877  |
|  |   | Odour concentration                          | No limit set              | --                         | Once every 6 months         | BS EN 13725   |

Note 1 – These emission limits are based on normal operating conditions and load - temperature 0°C (273K); pressure 101.3 kPa and oxygen 3%.

| <b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>  |               |                  |                           |                         |                             |                                      |
|--|---------------|------------------|---------------------------|-------------------------|-----------------------------|--------------------------------------|
| <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> |
| <p>Note 2 – 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> <p>Note 3 – These emission limits are based on normal operating conditions and load - temperature 0°C (273 K); pressure 101.3 kPa and oxygen 5% (for gas engines burning biogas) and oxygen 3% (for medium combustion plants other than engines and gas turbines burning biogas).</p> <p>Note 4 – This emission limit applies until 31 December 2029, unless the gas engine is replaced.</p> <p>Note 5 – This emission limit applies from 1 January 2030, unless otherwise advised by the Environment Agency.</p> <p>Note 6 – In relation to the thermal oxidiser, the concentration at a temperature of 273K and at a pressure of 101.3 k Pa, with no correction for water vapour content.</p> |               |                  |                           |                         |                             |                                      |

| <b>Table S3.2 Point source emissions to water (other than sewer) and land – emission limits and monitoring requirements</b> |                                    |  |                           |                         |                             |                                      |
|---|------------------------------------|--|---------------------------|-------------------------|-----------------------------|--------------------------------------|
| <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> |
| L6 [Point L6 on site plan in Schedule 7] emission to tributary of the River Deer  | Site surface water via interceptor | Visible oil or grease  | No visible oil or grease  | N/A                     | Monthly                     | Visual assessment                    |
|   |                                    | pH Monitored from the tributary of the River Deer, upstream and downstream of the installation as agreed by the Environment Agency                               | No limit set              | Spot sample             | Quarterly                   | BS ISO 10523                         |
|   |                                    | Biochemical Oxygen Demand (mg/l) Monitored from the tributary of the River Deer, upstream and downstream of the installation as agreed by the Environment Agency | No limit set              | Spot sample             | Quarterly                   | BS EN 1899-2                         |
|   |                                    | Ammoniacal nitrogen (mg/l) Monitored from the tributary of the River Deer, upstream and downstream of the installation as agreed by the Environment Agency       | No limit set              | Spot sample             | Quarterly                   | BS EN ISO 11905-1 or BS EN 12260     |
|   |                                    | Total Suspended Solids (mg/l) Monitored from the tributary of the River Deer, upstream and downstream of the installation as agreed by the Environment Agency    | No limit set              | Spot sample             | Quarterly                   | BS EN 872                            |

| Table S3.3 Surface water or groundwater monitoring requirements  |                         |                    |                      |   |                      |
|--|-------------------------|--------------------|----------------------|---|----------------------|
| Location or description of point of measurement  | Parameter               | Limit (incl. unit) | Monitoring frequency | Monitoring standard or method   | Other specifications |
| BH1 - Up-gradient (Background)<br>[Point BH1 on site plan in Schedule 7]   | pH                      | No limit           | Monthly              | In accordance with Environment Agency guidance, Monitoring stack emissions: environmental permits | --                   |
|  | Electrical Conductivity | No limit           | Monthly              |   | --                   |
|  | Ammoniacal Nitrogen     | No limit           | Monthly              |   | --                   |
|  | Nitrate                 | No limit           | Monthly              |   | --                   |
| BH2, BH3, BH5, BH6 and abstraction point<br>[Points BH2, BH3, BH5, BH6 & abstraction point on site plan in Schedule 7] | pH                      | No limit           | Monthly              | In accordance with Environment Agency guidance, Monitoring stack emissions: environmental permits | --                   |
|  | Electrical Conductivity | 320 µS/cm          | Monthly              |   | --                   |
|  | Ammoniacal Nitrogen     | 1.0 mg/l           | Monthly              |   | --                   |
|  | Nitrate                 | No limit           | Monthly              |   | --                   |
| BH4 (additional)<br>[Point BH4 on site plan in Schedule 7]   | pH                      | No limit           | Quarterly            | In accordance with Environment Agency guidance, Monitoring stack emissions: environmental permits | --                   |
|  | Electrical Conductivity |                    | Quarterly            |   | --                   |
|  | Ammoniacal Nitrogen     |                    | Quarterly            |   | --                   |
|  | Nitrate                 |                    | Quarterly            |   | --                   |



| <b>Table S3.4 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>  |
| Digester feed<br>(digestion process)   | pH                                    | As described in site operating techniques  | As described in site operating techniques   | Process monitoring to be recorded using a SCADA system where relevant.   |
|  | Alkalinity                            |  |   |  |
|  | Temperature                           |  |   |  |
|  | Hydraulic loading rate                |  |   |  |
|  | Organic loading rate                  |  |   |  |
|  | Volatile fatty acids concentration    |  |   |  |
|  | Ammonia                               |  |   |  |
|  | Liquid /foam level                    |  |   |  |
| Biogas in digester   | Flow                                  | Continuous   | In accordance with EU weights and measures Regulations                                  | Process monitoring to be recorded using a SCADA system where relevant.<br><br>Gas monitors to be calibrated every 6 months or in accordance with the manufacturer's recommendations. |
|  | Methane                               | Continuous   | None specified  |  |
|  | CO <sub>2</sub>                       | Continuous   | None specified  |  |
|  | O <sub>2</sub>                        | Continuous   | None specified  |  |
|  | Hydrogen sulphide                     | Daily  | None specified  |  |
|  | Pressure                              | Continuous   | None specified  |  |
| Digestate batch  | Volatile fatty acids concentration    | One sample at the end of each batch (hydraulic retention time) cycle. or as approved by the Environment Agency | As described in site operating techniques – Environmental Management System             | --   |
|  | Ammonia                               |  |   |  |
| Digesters and storage tanks  | Integrity checks                      | Weekly   | Visual assessment   | --   |
| Digesters  | Agitation /mixing                     | Continuous   | Systems controls.   | Records maintained in daily operational records.   |
|  | Tank capacity and sediment assessment | Once a year  | Yearly lithium or thermal imaging or other method as approved by the Environment Agency | In accordance with design specification and tank integrity checks.   |

| <b>Table S3.4 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>  |
| Waste reception building or area; Digesters and storage tanks                                   | Odour                                       | Daily  | Olfactory monitoring                     | Odour detection at the site boundary.  |
| Diffuse emissions from all sources identified in the Leak Detection and Repair (LDAR) programme | VOCs including methane                      | Every 6 months or otherwise agreed in accordance with the LDAR programme | In accordance with the LDAR programme    | Leak detection and repair (LDAR) programme in accordance with permit condition 3.2.4.  |
| CHP engine stacks   | VOCs including methane                      | Annually   | BS EN 12619                              | Total annual VOCs emissions from the CHP engines to be calculated and submitted to the Environment Agency.   |
|   | Exhaust gas temperature                     |  | Traceable to National Standards          |  |
|   | Exhaust gas pressure                        |  | Traceable to National Standards          |  |
|   | Exhaust gas water vapour content            |  | BS EN 14790-1                            | Unless gas is dried before analysis of emissions.  |
|   | Exhaust gas oxygen                          |  | BS EN 14789                              |  |
|   | Exhaust gas flow                            |  | BS EN 16911-1                            |  |
| Meteorological conditions   | Wind speed, air temperature, wind direction | Continuous   | Method as specified in management system | <p>Conditions to be recorded in operational diary and records.</p> <p>Equipment shall be calibrated on a 4 monthly basis, in accordance with manufacturer's recommendations or as agreed in writing by the Environment Agency.</p> |
| Emergency flare   | Operating hours                             | Continuous   |  | Date, time and duration of use of  |

| <b>Table S3.4 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>   |
|  | Quantity of gas sent to flare             |                             | Recorded duration and frequency.<br>Recording using a SCADA system or similar system | auxiliary flare shall be recorded.<br><br>Quantity can be estimated from gas flow composition, heat content, ratio of assistance, velocity, purge gas flow rate, pollutant emissions. |
| Pressure relief valves   | Biogas release and operational events     | Daily inspection            | Recorded duration and frequency.   | Operational record including date, time duration of pressure relief events and calculated annual mass release.<br><br>Pressure relief valves to be re-seated after release.           |
| Storage lagoons and storage tanks  | Volume                                    | Daily                       | Visual or flow metre measurement   | 750 mm freeboard must be maintained for storage lagoons.  |
| <b>Carbon filters</b>  |   |                             |  |   |
| <b>Carbon filters (A5, and A21)</b>  | Carbon bed temperature – inlet and outlet | Continuous                  | Temperature probe  | Odour abatement plant shall be managed in accordance with permit condition 3.3, the odour management plan and manufacturer's recommendations.   |
|  | Gas flow rate – inlet and outlet          | Continuous                  | Gas flow meter   |   |
|  | Moisture or humidity                      | Daily                       | Moisture meter   |   |
|  | Back pressure                             | Weekly                      | Recognised industry method   |   |
|  | Efficiency assessment                     | Annual                      | Emission removal efficiency (BS EN 13725 for odour removal)                          | Carbon filters to be replaced in accordance with manufacturer's recommendations.<br><br>Equipment shall be calibrated on a 4 monthly basis, or as agreed in                           |

| <b>Table S3.4 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>  |
|  |   |   |  | writing by the Environment Agency.   |
|  | Hydrogen sulphide – inlet and outlet gas stream   | Every 6 months or as agreed in writing by the Environment Agency. | CEN TS 13649 for sampling<br><br>NIOSH 6013 for analysis | Action levels to be agreed on completion of IC 9.34 as approved in writing by the Environment Agency.<br><br>Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan. |
|  | Ammonia – inlet gas stream                        | Every 6 months or as agreed in writing by the Environment Agency. | EN ISO 21877   | Action levels to be agreed on completion of IC 9.34 as approved in writing by the Environment Agency.<br><br>Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan. |
|  | Odour concentration – inlet and outlet gas stream | Every 6 months or as agreed in writing by the Environment Agency. | BS EN 13725  | Action levels to be agreed on completion of IC 9.34 as approved in writing by the Environment Agency.<br><br>Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan. |

## Schedule 4 – Reporting

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

| <b>Table S4.1 Reporting of monitoring data</b>  |   |                         |                      |
|---|---|-------------------------|----------------------|
| <b>Parameter</b>  | <b>Emission or monitoring point/reference</b> | <b>Reporting period</b> | <b>Period begins</b> |
| Emissions to air from CHP engines<br>Parameters as required by condition 3.5.1.           | A2, A3, A4, A11, A15 and A16                  | Every 12 months         | 1 January            |
| Emissions to air from emergency flare<br>Parameters as required by condition 3.5.1.       | A1  | Every 12 months         | 1 January            |
| Emissions to air from odour abatement plant<br>Parameters as required by condition 3.5.1. | A5, A7, A10 and A21                           | Every 6 months          | 1 January, 1 July    |
| Emissions to water and land<br>Parameters as required by condition 3.5.1                  | L6  | Every 12 months         | 1 January            |
| Process monitoring<br>Parameters as required by condition 3.5.1                           | As specified in schedule 3 table S3.4         | Every 12 months         | 1 January            |
| Total annual VOCs emissions from gas engines (calculated)                                 | As specified in schedule 3 table S3.4         | Every 12 months         | 1 January            |

| <b>Table S4.2 Annual production/treatment</b> |                          |
|---|--------------------------|
| <b>Parameter</b>                              | <b>Units</b>             |
| Electricity generated                         | MWh                      |
| Whole digestate                               | tonnes                   |
| Liquid digestate                              | tonnes or m <sup>3</sup> |
| Solid digestate                               | tonnes                   |
| Non-waste outputs                             | tonnes                   |

| <b>Table S4.3 Performance parameters</b> |                                |                          |
|--|--------------------------------|--------------------------|
| <b>Parameter</b>                         | <b>Frequency of assessment</b> | <b>Units</b>             |
| Water usage                              | Annually                       | tonnes or 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                    |

| <b>Table S4.3 Performance parameters</b> |                                |              |
|--|--------------------------------|--------------|
| <b>Parameter</b>                         | <b>Frequency of assessment</b> | <b>Units</b> |
| CHP engine efficiency                    | Annually                       | %            |
| Auxiliary boiler usage                   | Annually                       | hours        |

| <b>Table S4.4 Reporting forms</b> |  |                     |
|-----------------------------------|--|---------------------|
| <b>Media/parameter</b>            | <b>Reporting format</b>  | <b>Date of form</b> |
| Air                               | Form air 1 or other form as agreed in writing by the Environment Agency          | 14/10/2020          |
| Process monitoring                | Form process 1 or other form as agreed in writing by the Environment Agency      | 14/10/2020          |
| Water                             | Form water 1 or other form as agreed in writing by the Environment Agency        | 14/10/2020          |
| Water usage                       | Form water usage 1 or other form as agreed in writing by the Environment Agency  | 14/10/2020          |
| Energy usage                      | Form energy 1 or other form as agreed in writing by the Environment Agency       | 14/10/2020          |
| Other performance indicators      | Form performance 1 or other form as agreed in writing by the Environment Agency  | 14/10/2020          |
| 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.

“accident management plan” means a plan that identifies risks and failures which can have an impact on the environment or have environmental consequences. The plan forms part of the management system. The plan must minimise the potential causes and consequences and identify clearly the roles, responsibilities and action to be taken to minimise the consequences of accidents. This includes measures to prevent and control fires on site, DSEAR assessment and clearly marked zones.

“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 By-Products Regulations” means The Animal By-Products (Enforcement) (England) Regulations 2013 (SI 2013 No.2952).

“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.

“Best available techniques” means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole:

(a) ‘techniques’ includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;

(b) ‘available techniques’ means those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator;

(c) ‘best’ means most effective in achieving a high general level of protection of the environment as a whole.

“Biodegradable” means a material is capable of undergoing biological anaerobic or aerobic degradation leading to the production of CO<sub>2</sub>, H<sub>2</sub>O, methane, biomass, and mineral salts, depending on the environmental conditions of the process.

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

“Capacity” means the potential capacity and not historical or actual production levels or throughput. This means that the designed capacity is the maximum rate at which the site can operate. Biological treatment of waste usually takes place over more than one day, so the physical daily capacity can be calculated by dividing the maximum quantity of waste that could be subject to biological treatment at any one time by the minimum residence time. For in-vessel composting, the residence time for sanitisation should be calculated separately and then aggregated to the complete composting time.

“channelled emissions” means the emissions of pollutants into the environment through any kind of duct, pipe, stack, etc. This also includes emissions from open top biofilters.

“combined heat and power” (CHP) or Cogeneration means the simultaneous generation in one process of thermal energy and electrical or mechanical energy.

“compost” means a 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 and is capable of breaking down by microbial digestion to create compost.

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

“composting batch” means an identifiable quantity of material that progresses through the composting system and when fully processed has similar characteristics throughout. For composting systems that operate on a continuous- or plug-flow basis, batches will be taken to mean a series of “portions of production”.

“diffuse emissions” mean non-channelled emissions (e.g. of dust, organic compounds, odour) which can result in ‘area’ sources (e.g. tanks) or ‘point’ sources (e.g. pipe flanges). This also includes emissions from open-air windrow composting.

“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.

“existing medium combustion plant” means an MCP which was put into operation before 20 December 2018.

“generator” means any combustion plant which is used to generate electricity, excluding mobile, unless it is connected to the national grid.

“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

“Leak detection and repair (LDAR) programme” means a structured approach to reduce fugitive emissions of organic compounds by detection and subsequent repair or replacement of leaking components. Currently, sniffing (described by EN 15446) and optical gas imaging methods are available for the identification of leaks as set out in BAT 14 and section 6.6.2 of the Waste Treatment BAT Conclusions.

“maturation” means optional period of treatment or storage of separated fibre digestate under predominantly aerobic conditions.

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

“medium combustion plant” or “MCP” means a combustion plant with a rated thermal input equal to or greater than 1 MW but less than 50 MW.

“Medium Combustion Plant Directive” or “MCPD” means Directive 2015/2193/EU of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants.

“new medium combustion plant” means an MCP which was put into operation after 20 December 2018. This includes replacement MCP and Generators.

“operational area” means any part of a facility used for the handling, storing and treatment of waste.

“operator” means in relation to a regulated facility:

- (a) the person who has control over the operation of the regulated facility,
- (b) if the regulated facility has not yet been put into operation, the person who will have control over the regulated facility when it is put into operation, or
- (c) if a regulated facility authorised by an environmental permit ceases to be in operation, the person who holds the environmental permit

“pests” means Birds, Vermin and Insects.

“pollution” means emissions as a result of human activity which may—

- (a) be harmful to human health or the quality of the environment,
- (b) cause offence to a human sense,
- (c) result in damage to material property, or
- (d) impair or interfere with amenities and other legitimate uses of the environment.

“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.

“Representative internal” – means representative monitoring at a point internally of the windrows that will give a representative assessment of temperature. Note: Larger windrows will require more bespoke temperature equipment to adequately assess temperature profiles accurately.

“sanitisation” means the actively managed and intensive stage of composting, lasting for at least 5 days, characterised by high oxygen demand and temperatures of over 55°C, during which biological processes, together with conditions in the composting mass, eradicate human and animal pathogens or reduce them to acceptably low levels.

“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.

“specified generator” means a group of generators other than excluded between 1 and 50 megawatts or less than 50 megawatts as defined in Schedule 25B(2) of SI 2018 No.110 of the EPR.

“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.

“stabilisation stage” means the stage of composting following sanitisation, during which biological conditions in the composting mass, give rise to compost that is nominally stable.

“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 varnish).

“VOC” means Volatile organic compounds as defined in Article 3(45) of Directive 2010/75/EU – ‘volatile organic compound’ means any organic compound as well as the fraction of creosote, having at 293.15K a vapour pressure of 0.01 kPa or more, or having a corresponding volatility under the particular conditions of use.

“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.

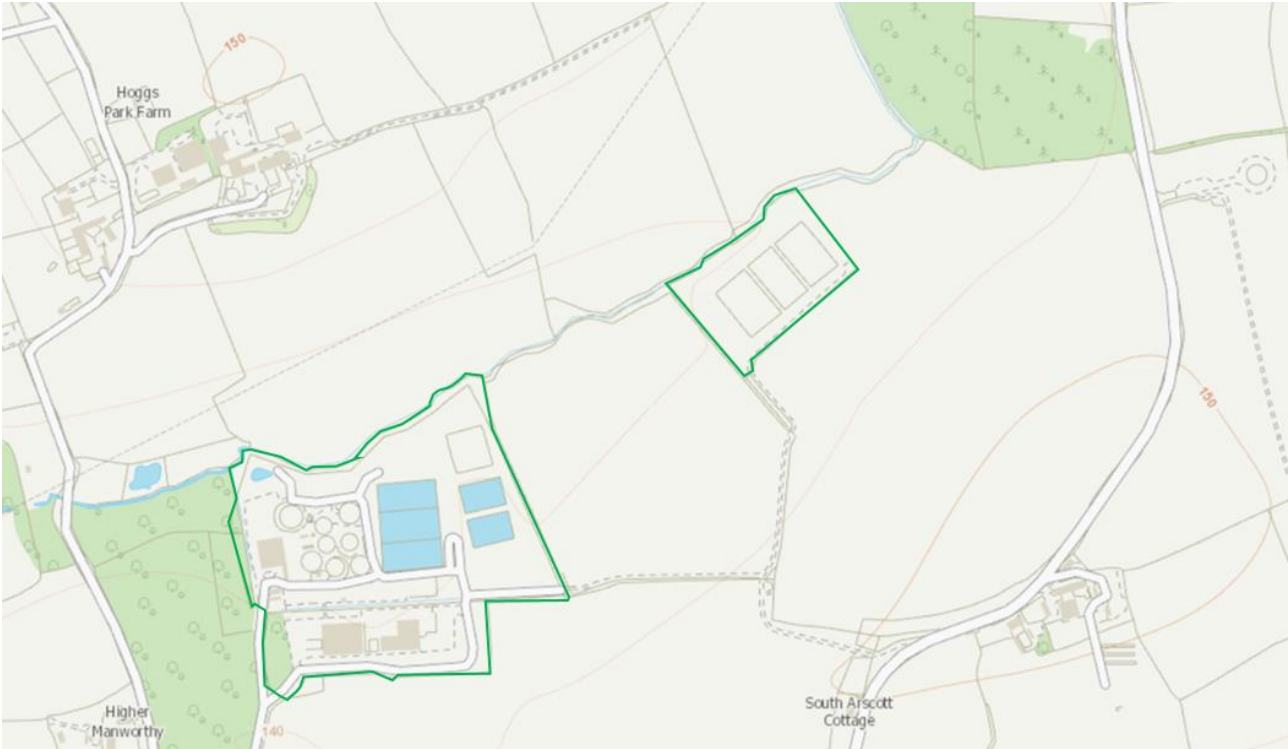
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

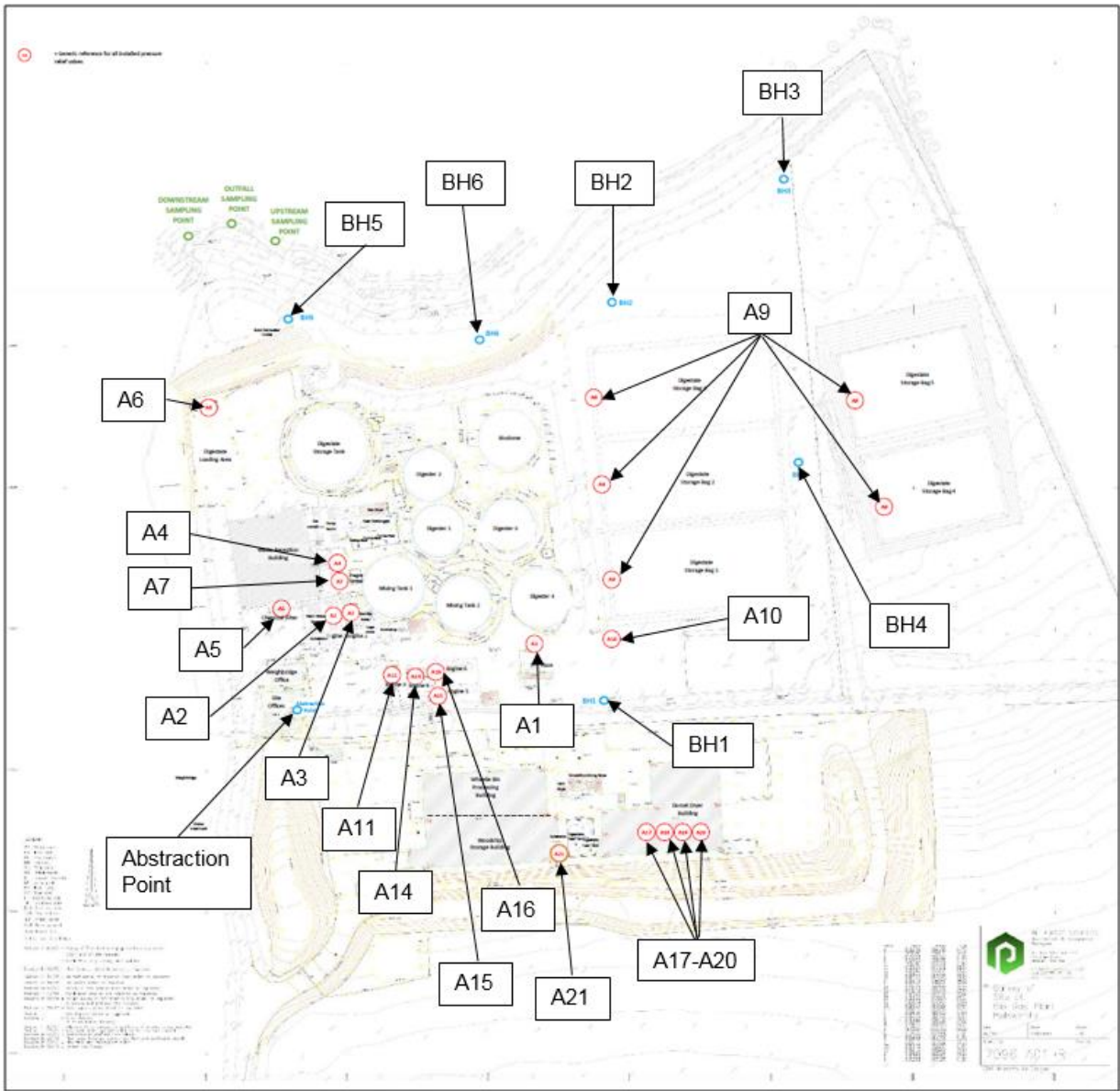
- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid fuels and gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

“year” means calendar year ending 31 December.

# Schedule 7 – Site plan



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# Annex 1 of MCP

|  |  |
|--|--|
| <p><b>1. Rated thermal input (MW) of the medium combustion plant.</b></p>  | <p>CHP Biogas Engine 1 – 2.55 MW<br/>         CHP Biogas Engine 2 – 2.55 MW<br/>         CHP Biogas Engine 3 – 1.32 MW<br/>         CHP Biogas Engine 4 – 3.27 MW<br/>         CHP Biogas Engine 5 – 2.55 MW<br/>         CHP Biogas Engine 6 – 2.55 MW</p>  |
| <p><b>2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).</b></p>  | <p>All MCP are Biogas Engines</p>  |
| <p><b>3. Type and share of fuels used according to the fuel categories laid down in Annex II.</b></p>  | <p>All MCP are fuelled with 100% "Gaseous fuels other than natural gas" (biogas)</p>   |
| <p><b>4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.</b></p>                          | <p>CHP Biogas Engine 1 – 01/04/2002<br/>         CHP Biogas Engine 2 – 25/06/2019<br/>         CHP Biogas Engine 3 – 24/11/2014<br/>         CHP Biogas Engine 4 – 03/12/2010<br/>         CHP Biogas Engine 5 – 03/12/2010<br/>         CHP Biogas Engine 6 – 24/01/2013</p>  |
| <p><b>5. Sector of activity of the medium combustion plant or the facility in which it is applied (NACE code).</b></p>   | <p>NACE E38 - Waste collection, treatment and disposal activities; materials recovery</p>  |
| <p><b>6. Expected number of annual operating hours of the medium combustion plant and average load in use.</b></p>   | <p>CHP Biogas Engine 1 – 500hrs, 100% average load<br/>         CHP Biogas Engine 2 – 8760 hrs, 100% average load<br/>         CHP Biogas Engine 3 – 8760 hrs, 100% average load<br/>         CHP Biogas Engine 4 – 200 hrs, 100% average load<br/>         CHP Biogas Engine 5 – 8670 hrs, 100% average load<br/>         CHP Biogas Engine 6 – 5000 hrs, 100% average load</p> |
| <p><b>7. Where the option of exemption under Article 6(3) or Article 6(8) is used, a declaration signed by the operator that the medium combustion plant will not be operated more than the number of hours referred to in those paragraphs.</b></p> | <p>N/A</p>   |

|   |  |  |
|---|--|--|
| <b>8. Name and registered office of the operator and, in the case of stationary medium combustion plants, the address where the plant is located.</b> | Registered office<br><br>Andigestion Limited<br>7 Summerleaze Road<br>Maidenhead<br>Berkshire<br>SL6 8SP | Site Address<br><br>Andigestion Limited<br>Holsworthy Biogas Plant<br>Chilsworthy<br>Holsworthy<br>Devon<br>EX22 7HH |
|---|--|--|

END OF PERMIT