Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Eco Verde Energy Limited

Attleborough Anaerobic Digestion Plant
Ellingham Road
Attleborough
Norfolk
NR17 1AE

Variation application number

EPR/XP3102MJ/V002

Permit number

EPR/XP3102MJ

Attleborough Anaerobic Digestion Plant
Permit number EPR/XP3102MJ

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 notice

Crop-AD Plant

The current facility is an on-farm Crop AD plant. Site infrastructure include silage clamps, two feeders, two primary digesters, a secondary digester, a separator, a covered digestate storage lagoon, a flare and a combined heat and power engine (CHP). The Mississippi dryer, boiler and dirty water lagoon are being decommissioned.

The feedstocks for the existing Crop AD plant are energy crops namely maize and rye silage in addition to silage effluent and dirty water generated on-site. The Crop AD plant processes about 30,295 tonnes per year, operating in the thermophilic temperature range.

Waste AD Plant

This variation application seeks to vary the permit from a standard rules installation to a bespoke installation. The variation also seeks to extend the site boundary to add land to the permitted area for a food waste anaerobic digestion facility (Waste AD Plant). This shall comprise a building for food waste reception and processing and digestate separation, fibre storage, three pasteurisers, three primary digesters, a secondary digester, covered digestate lagoon, surface water lagoon, new dirty water lagoon, gas upgrade equipment, grid entry unit, back-up boiler and a dual fuel flare. The new infrastructure for treating food waste and the resultant biogas is termed the ‘Waste-AD Plant’.

The Crop-AD plant will operate separately to the new Waste-AD plant with respect to feedstocks, digestate and biogas management, however the CHP engine will provide heat and power to both AD plants. Together, the Crop AD Plant and the Waste AD Plant will form an Installation.

The Waste AD Plant has been designed to process up to 100,000 tonnes of waste per year of solid and liquid food waste, operating in the mesophilic temperature range. Permitted waste will be delivered to the site in covered vehicles and deposited in an enclosed reception building.

Following digestion, the by-product from the process (whole digestate) will be transferred to three pasteurisation tanks for heat treatment at 70ºC for a minimum of one hour in accordance with the Animal By-Product Regulations.

The digestate from the Waste AD plant will be separated into the solid and liquid fraction in the enclosed reception building. The separated fibre will be stored within the reception building and the liquor will be stored in a purpose-built covered digestate lagoon. The building is equipped with an extraction ventilation system which extracts air to an odour abatement system consisting of a Centri Air abatement system and carbon filters that will treat odour emissions prior to discharge to atmosphere. Digestate derived from the Crop-AD Plant is separated externally and the fibre falls from the separator via a covered chute into a covered trailer and despatched off site. This environmental permit does not authorise the spreading of digestate on any land.

The biogas produced on site will be stored in gas holders in the roof space of the digesters. Biogas will be diverted to the CHP engine, boiler and upgrading unit, where it will be combusted to produce electricity or heat or upgraded to produce biomethane that can be injected into the National Grid. The heat produced from the CHP engine and boiler will be recovered and integrated into the process heating requirements. Electricity generated by the CHP engine will be used for on-site operations at both AD plants. There is also a generator used for site operations in emergency events.

There are two emergency flares which will operate to deal with any excess biogas or situations where there is a risk of excess pressure building up within the system, especially when the gas upgrading plant and CHP engine and/or boiler are not running due to routine maintenance or breakdown.

Air emissions include point source emissions from the CHP engine, the emergency flares, boiler, odour abatement stack, gas upgrading plant stack and tank pressure relief valves. All emissions have been assessed in line with our technical guidance and appropriate emissions limits set in the permit.

There are no process discharges to controlled waters or sewer. Site surface water run-off is directed to a surface water attenuation pond for re-use on site.

The installation is located at National Grid Reference TM 03300 95600. It lies approximately 250 metres to the north-west of the A11 dual carriageway, immediately beyond which lies the town of Attleborough, Norfolk. A tributary of the River Thet lies approximately 120 metres to the south of the site. Norfolk Valley Fens SAC and Breckland SPA, are located within 10 km of the site. Attleborough Wood (Local Wildlife Site and Ancient Woodlands) is located within 2 km of the installation.

Changes introduced by the Waste Treatment BAT Conclusions

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.

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 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 received EPR/BB3931RA/A001	Duly made 01/10/2012	Application for an on-farm anaerobic digestion waste facility (SR2010No16).
Permit determined EPR/BB3931RA	07/11/2012	Permit issued to SS Agri Power Limited.
Application EPR/BB3931RA/V002 (variation of standard rules)	Duly made 30/01/2015	Application to change current waste standard rules (SR2010No16) to an on-farm anaerobic digestion installation facility (SR2012No9) in line with the Industrial Emission Directive.
Variation determined EPR/BB3931RA	09/10/2015	Varied permit issued.
Notified of change of Company Name and registered office address	11/03/2020	Company name changed to Attleborough Eco Electric Limited and registered office address changed to 4th Floor, 36 Spital Square, London. E1 6DY.

Status log of the permit		
Description	**Date**	**Comments**
Variation issued EPR/BB3931RA/V003	04/05/2020	Varied permit issued to Attleborough Eco Electric Limited.
Application EPR/XP3102MJ/T001 (full transfer of permit EPR/BB3931RA)	Duly made 27/08/2021	Application to transfer the permit in full to Eco Verde Energy Limited.
Transfer determined EPR/XP3102MJ	15/03/2022	Full transfer of permit complete.
Application EPR/XP3102MJ/V002 (variation and consolidation)	Duly made 04/03/2022	Application to vary permit from a standard rules Installation to a bespoke IED Installation and update the permit to modern conditions.
Additional information received	18/07/2022	Response to Schedule 5 Notice dated 20/06/2022.
Additional information received	09/08/2022	Updated odour management plan.
Additional information received	24/08/2022	Updated emission points plan and combustion information on CHP engine, back-up boiler and emergency generator.
Additional information received	26/08/2022	Updated emission points plan.
Additional information received	01/09/2022	Updated emission points plan.
Application EPR/XP3102MJ/V002 (variation and consolidation) Variation determined EPR/XP3102MJ (Billing Ref: CP3023PX)	29/09/2022	Varied and consolidated permit issued.

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/XP3102MJ

Issued to

Eco Verde Energy Limited ("the operator")

whose registered office is

The Old School
High Street
Stretham
Ely
CB6 3LD

company registration number 11733164

to operate a regulated facility at

Attleborough Anaerobic Digestion Plant
Ellingham Road
Attleborough
Norfolk
NR17 1AE

to the extent set out in the schedules.

The notice shall take effect from 29/09/2022.

Name	Date
Rebecca Warren	**29/09/2022**

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/XP3102MJ

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/XP3102MJ/V002 authorising,

Eco Verde Energy Limited ("the operator"),

whose registered office is

The Old School
High Street
Stretham
Ely
CB6 3LD

company registration number 11733164

to operate an installation at

Attleborough Anaerobic Digestion Plant
Ellingham Road
Attleborough
Norfolk
NR17 1AE

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

Name	Date
Rebecca Warren	**29/09/2022**

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

1.2.2 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

1.3.2 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

1.4.2 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.

1.4.3 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

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

2.1.3 The activities shall be undertaken in accordance with best available techniques.

2.1.4 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.

2.2 The site

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

2.3 Operating techniques

2.3.2 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.

2.3.3 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.

2.3.4 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.

2.3.5 Waste shall only be accepted if:

(a) it is of a type and quantity listed in schedule 2 tables S2.2 and S2.3.

(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.

2.3.6 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.

2.3.7 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.

2.3.8 Waste pre-acceptance and acceptance procedures shall be undertaken in accordance with best available techniques.

2.3.9 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

2.4.2 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.

2.4.3 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.

2.5 Pre-operational conditions

2.5.1 The operations specified in schedule 1 table S1.4 shall not commence until the measures specified in that table have been completed.

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.2 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 table S3.1.

3.1.3 The limits given in schedule 3 shall not be exceeded.

3.1.4 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

3.2.2 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.

3.2.3 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.

3.2.4 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.

3.2.5 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

3.3.2 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

3.4.2 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.

3.4.3 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

3.5.2 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

(a) point source emissions specified in table S3.1;

(b) process monitoring specified in table S3.2.

3.5.3 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.

3.5.4 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.

3.5.5 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 table S3.1 unless otherwise agreed in writing by the Environment Agency.

3.5.6 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.

3.5.7 Monitoring shall not take place during periods of start-up or shut-down.

3.6 Pests

3.6.2 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.

3.6.3 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

3.7.2 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.

3.7.3 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.

3.7.4 The operator shall undertake a DSEAR assessment and maintain an accident management plan.

4 Information

4.1 Records

4.1.2 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.

4.1.3 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

4.2.2 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.

4.2.3 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.

4.2.4 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.

4.2.5 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.

4.2.6 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.

4.2.7 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.

4.2.8 The operator shall submit an annual report detailing the efficiency of removal of non-compostable and non-digestible materials from feedstock prior to processing and the level of contamination in the final recovered digestate and/or compost.

4.3 Notifications

4.3.2 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.

4.3.3 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.

4.3.4 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.

4.3.5 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.

4.3.6 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.

4.3.7 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.

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

4.3.9 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

4.4.2 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.3 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

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
AR1	S5.4 A(1)(b)(i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment.	R3: Recycling/reclamation of organic substances which are not used as solvents	From receipt of permitted waste and non-waste through to digestion and recovery of by-products (digestate). Anaerobic digestion of permitted waste and non-waste in seven tanks (Waste AD – 4 tanks) and (Crop AD – 3 tanks) followed by burning and/or upgrading of biogas produced from the process. Waste types suitable for acceptance are limited to those specified in Table S2.2 and S2.3.
	Directly Associated Activity		
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 and non-waste to pre-treatment and despatch for anaerobic digestion on site. Storage of residual wastes from pre-treatment to despatch off-site for recovery. Storage of waste in three enclosed tanks connected to odour abatement and on an impermeable surface with a sealed drainage system. Storage of waste in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with a sealed drainage system. Storage of non-waste in covered clamps and on an impermeable surface with a sealed drainage system.

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
			Waste types suitable for acceptance are limited to those specified in Table S2.2 and S2.3.
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. Pre-treatment of waste in enclosed building fitted with appropriate odour abatement and on impermeable surface with a sealed drainage system including shredding, sorting, screening, compaction, baling, mixing and maceration. Post-treatment of waste digestate in an enclosed building fitted with appropriate odour abatement 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). Post-treatment of non-waste digestate on an impermeable surface with 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). Heat treatment (pasteurisation) of waste in

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
			three tanks for the purpose of recovery. Gas cleaning by biological or physical (carbon filtration) or chemical scrubbing. Waste types suitable for acceptance are limited to those specified in Table S2.2 and S2.3.
AR4	Steam and electrical power supply	R1:Use principally as a fuel to generate energy	From the receipt of biogas produced at the on-site anaerobic digestion process to combustion with the release of combustion gases. Combustion of biogas in one combined heat and power (CHP) engine with a thermal input of 3.7 MW. Combustion of biogas in one dual fuel boiler with a thermal input of 0.61 MW. Combustion of diesel in one emergency generator with a thermal input of 0.53 MW.
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 release of combustion gases. Use of two auxiliary flares (Crop AD Plant and Waste AD Plant) required only during periods of breakdown or maintenance of the CHP engine and biogas upgrading plant.
AR6	Gas upgrading	Upgrading of biogas to biomethane (including the removal of moisture and other substances such as carbon dioxide, hydrogen sulphide and Volatile	From the receipt of biogas produced at the on-site anaerobic digestion process to injection into the National Grid. This includes return of off-specification biogas to

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
		organic compounds) for injection into the National Grid.	gas storage dome or combusted in the dual fuel boiler and/or emergency flares.
AR7	Raw material storage	Storage of raw materials including lubrication oil, antifreeze, propane, ferric chloride, activated carbon, diesel, odorant, sulphuric acid, oxygen, de-foaming oil	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 roof space of digesters. 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. Storage of processed uncertified liquid digestate in two lagoons. Temporary storage of processed crop digestate fibre in trailer prior to despatch off site. Storage of processed uncertified digestate fibre in enclosed building and on an impermeable surface with a sealed drainage system.
AR10	Surface water collection and storage	Collection and storage of uncontaminated roof and site surface water in one surface water attenuation pond and dirty water lagoon.	From the collection of uncontaminated roof and site surface water from non-operational areas only to re-use within the facility.
AR11	Odour abatement	Collection and treatment of air	From the collection of air from site processes to treatment and release of treated air to atmosphere.

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
			Collection and treatment of air from the buildings or plant using abatement system – [Centri Air system and carbon filters] prior to release to atmosphere.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	The operating techniques described in the application (Responses to Part B2 and B3 of the application forms and references to supporting documentation. • ETL573/Attleborough AD/NTS/V1.0 – Non technical summary • ATT-OD-01 Environmental Management System Manual • ATT-OD-05 – Accident Management Plan • ETL573/Attleborough AD/BAT/V1.0 – Best Available Techniques	25/10/2021
Response to Schedule 5 Notice dated 20/06/2022	Operating techniques described in the response to Schedule 5: • Response 2 (storage of waste and reduction of odour emissions) • Response 3 (channelled emissions to air) • Response 4 (odour management plan) • Response 5 (reduction of diffuse emissions to air) • Response 6 (optimisation of water consumption and reduction of emissions to soil and water) • Response 7 (reduction of emissions to water & BAT-AELs for direct discharges) • Response 8 (odour abatement system – Centri Air system) • Response 9 (emissions from gas roof fan exhausts) • Response 11 (digestate storage lagoon /dirty water storage lagoon)	18/07/2022
Additional information received	Updated Odour Management Plan.	09/08/2022
Additional information received	Updated emission points plan and combustion information on CHP engine, back-up boiler and emergency generator.	24/08/2022
Additional information received	Updated emission points plan.	01/09/2022

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
Improvement conditions for assessing emissions from the biogas upgrading plant (Biogas upgrading plant)		
IC1	The operator shall carry out a monitoring study to verify the assumptions made in the application in relation to the releases of pollutants to air. The study shall include the monitoring of point source releases to air from the biogas upgrading plant emission point A06 during normal operation, having regard to the Environment Agency technical guidance, *Monitoring stack emissions: environmental permits* and to MCERTS standards. As a minimum, two separate monitoring campaigns in a year shall be completed (one monitoring survey six months following commissioning of the biogas upgrading plant). The pollutants to be monitored shall include: • total volatile organic compounds; and • hydrogen sulphide	29/09/2023
IC2	Following the completion of IC1, the operator shall undertake an emissions impact assessment of point source releases to air from emission point A06, using the information obtained through the emissions monitoring. The emissions impact assessment report and all associated monitoring reports and assessments shall be submitted in writing to the Environment Agency for review. The emissions impact assessment shall, as a minimum, include: • reports showing details of the monitoring undertaken and the results obtained; • results of the assessment of long and short term impacts from the emissions in accordance with Environment Agency Guidance – Air emissions risk assessment for your environmental permit • a completed H1 assessment software tool If the H1 assessment shows potential long or short term impacts from the emissions, the operator shall propose an action plan to reduce the impacts of the substances identified.	27/10/2023 or any other date as agreed with the Environment Agency
Improvement condition for storage lagoon design		
IC3	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 an inspection and program of works undertaken by a competent structural engineer, in accordance with the risk assessment methodology detailed within CIRIA C736 (2014) guidance, of the condition and extent of the site lagoon where digestate is being stored, treated, and/or handled. The inspection shall consider, but not be limited to, the transfer pipework/pumps, and liners underlying the storage lagoon. The plan shall include: • an assessment of the physical condition of the storage lagoon, using a Written Scheme of Examination and the suitability for providing containment when subjected to the dynamic and static loads caused by the digestate; • a program of works with timescales for the implementation of individual improvement measures necessary for the storage lagoon to comply with CIRIA C736 (2014) guidance, or equivalent.	29/09/2023

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
	• a preventative maintenance and inspection regime The plan shall be implemented in accordance with the Environment Agency's written approval.	
Improvement condition for lagoon cover and operational storage capacity		
IC4	The operator shall provide a written "digestate liquor 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 liquor 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. The storage plan shall include: • Existing cover arrangements on storage lagoons used to store digestate liquor to minimise odour, ammonia and methane emissions; • Additional storage capacity on-site (at least 2 months storage) and storage capacity off-site; • Identification of alternative outlets for digestate liquor – 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. The plan shall be implemented in accordance with the Environment Agency's written approval.	29/09/2023
Improvement condition for review of effectiveness of abatement plant		
IC5	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. The operator shall submit a written report to the Environment Agency following this review for assessment and approval. The report shall include but not limited to the following aspects: • Full investigation and characterisation of the waste gas streams. • Abatement stack monitoring results (not limited to odour and ammonia) • Abatement process monitoring results (not limited to odour and ammonia) • Details of air quality quantitative impact assessment including modelling and a proposal for site-specific "action levels" (not limited to odour concentration, hydrogen sulphide and ammonia). • Odour monitoring results at the site boundary • Records of odour complaints and odour related incidents • Recommendations for improvement including the replacement or upgrading the abatement plant	29/09/2023

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
	• Timescales for implementation of improvements to the abatement plant The operator shall implement the improvements in line with the timescales as approved by the Environment Agency.	
Improvement condition for assessment of methane slip		
IC6	The operator shall establish the methane emissions in the exhaust gas from engine burning biogas and compare these to the manufacturer's specification and benchmark levels agreed in writing with the Environment Agency. The operator shall, as part of the methane leak detection and repair (LDAR) programme, develop proposals to assess the potential for methane slip and take corrective actions where emissions above the manufacturer's specification or appropriate benchmark levels are identified.	29/09/2023

Table S1.4 Pre-operational measures for future development		
Reference	**Operation**	**Pre-operational measures**
1	Waste AD Plant	At least 2 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of operations of the installation, the operator shall submit a written copy of the final site Environmental Management System and make available for inspection all documents and procedures which form part of the site EMS. The EMS shall cover all activities at the installation and shall be in accordance with our guidance, How to develop a management system: environmental permits and Waste Treatment BREF. The EMS shall include the techniques the operator relies upon to manage the operation, accidents (including flooding), closure and decommissioning of the site. The documents and procedures set out in the EMS shall form the written management system referenced in condition 1.1.1 (a) of the permit.
2	Waste AD Plant	At least 8 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of operations of the installation, the operator shall ensure that a review of the design, method of construction and integrity of the proposed site secondary containment is carried out by a qualified engineer. The review shall compare the constructed secondary containment against the standards set out in CIRIA C736 (2014) guidance - Containment Systems for the Prevention of Pollution - secondary, tertiary and other measures for industrial and commercial premises or other relevant industry standard. The review shall include: • physical condition of the secondary containment; • the suitability for providing containment when subjected to the dynamic and static loads caused by catastrophic tank failure;

Table S1.4 Pre-operational measures for future development		
Reference	**Operation**	**Pre-operational measures**
		• any work required to ensure compliance with the standards set out in CIRIA C736 or other relevant industry standard; and • a preventative maintenance and inspection regime A written report of the review shall be submitted to the Environment Agency detailing the review's findings and recommendations. Remedial action shall be taken to ensure that the secondary containment meets the standards set out in the technical guidance documents and implement the maintenance and inspection regime.
3	Acceptance and treatment of wastes in Table S2.3.	The operator shall submit a detailed characterisation of the proposed wastes in Table S2.3 which demonstrates their suitability for biological treatment by anaerobic digestion. The characterisation shall be undertaken in accordance with section 13 of our guidance, Biological waste treatment: appropriate measures for permitted facilities (published 21 September 2022), and must be accompanied by quantitative analysis. No waste in Table S2.3 shall be accepted at the installation unless the Environment Agency has given prior written permission under this condition.

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	**Specification**
Vegetable matter (energy crops)	Substantially free of non-vegetable matter
Maize silage	Substantially free of non-vegetable matter

Table S2.2 Permitted waste types and quantities for anaerobic digestion	
Maximum quantity	**The total annual throughput of waste in Table S2.2 and S2.3 combined shall not exceed 100,000 tonnes.**
Exclusions	Wastes having any of the following characteristics shall not be accepted: • biodegradable wastes that is significantly contaminated with non-compostable or digestible contaminants, in particular plastic and litter shall be no more than 5% w/w and shall be as low as reasonably practicable by 31 December 2025. • wastes containing wood-preserving agents or other biocides and post-consumer wood • wastes containing persistent organic pollutants • wastes containing Japanese Knotweed or other invasive plant species listed in the Invasive Species (Amendment etc.) (EU Exit) Regulations 2019 • 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. • pest infested waste
Waste code	**Description**
02	**Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing**
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 01	sludges from washing and cleaning – vegetables, fruit and other crops
02 01 02	animal tissue waste
02 01 03	plant tissue waste
02 01 06	animal faeces, urine and manure (including spoiled fully biodegradable animal bedding)
02 01 07	wastes from forestry
02 01 99	wastes not otherwise specified – spent mushroom compost from commercial mushroom growing only
02 02	**wastes from the preparation and processing of meat, fish and other foods of animal origin**
02 02 01	sludges from washing and cleaning, peeling, centrifuging and separation including wash waters and sludges from secondary food processing or the cook chill sector
02 02 02	animal tissue waste
02 02 03	materials unsuitable for consumption or processing including animal gut contents
02 02 04	sludges from on-site effluent treatment including sludges from gelatine production

02 03	**wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation**
02 03 01	sludges from washing, cleaning peeling, centrifuging and separation (including sludge from production of edible fats and oils, seasoning residues, molasses residues, residues from production of potato, corn or rice starch only)
02 03 04	materials unsuitable for consumption or processing (including waste from production of edible fats and oils, seasoning residues, molasses residues, residues from production of potato, corn or rice starch only)
02 03 05	sludges from on-site effluent treatment (including sludge from production of edible fats and oils, seasoning residues, molasses residues, residues from production of potato, corn or rice starch only)
02 04	**wastes from sugar processing**
02 04 03	sludges from on-site effluent treatment – sludges from the processing of sugar
02 05	**wastes from the dairy products industry**
02 05 01	materials unsuitable for consumption or processing – biodegradable wastes derived from the processing of dairy products only
02 05 02	sludges from on-site effluent treatment
02 06	**wastes from the baking and confectionery industry**
02 06 01	materials unsuitable for consumption or processing – biodegradable wastes from the processing of materials used in bakery and confectionery
02 06 03	sludges from on-site effluent treatment – sludges from the processing of materials used in baking and confectionery
02 07	**wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)**
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials – biodegradable wastes from the processing of the raw materials used in the production of such beverages only (wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa))
02 07 02	wastes from spirits distillation – spent grains, hops and whisky filter sheets and cloths, yeast and yeast like residues, sludge from production process, or malt husks, malt sprouts, yeasts and yeast-like residues only
02 07 04	materials unsuitable for consumption or processing – biodegradable wastes from the processing of the raw materials used in the production of such beverages only (wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa))
04	**Wastes from the leather, fur and textile industries**
04 02	**wastes from the textile industry**
04 02 10	organic matter from natural products, e.g. grease, wax
07	**Wastes from organic chemical processes**
07 01	**wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals**
07 01 08*	glycerol waste from bio-diesel manufacture from non-waste vegetable oils only
16	**Wastes not otherwise specified in the list**
16 10	**aqueous liquid wastes destined for off-site treatment**
16 10 02	untreated wash waters from cleaning fruit and vegetables on farm only
16 10 02	milk and dairy waste milk from agricultural premises only

16 10 02	liquor/leachate from a composting process that accepts waste input types listed in this table only and in compliance with Animal By-Products Regulations
19	**Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use**
19 02	**wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)**
19 02 03	premixed wastes composed of waste types listed within this table, Table S2.2 only
19 02 06	sludge types from waste listed within this table, Table S2.2, that have been heat treated only
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05 (sewage sludge which has been previously pasteurised and stabilised only)
19 02 10	glycerol not designated as hazardous i.e. excludes EWC code 19 02 08
19 05	**wastes from the aerobic treatment of solid wastes**
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
19 06	**wastes from anaerobic treatment of waste**
19 06 03	liquor from anaerobic treatment of municipal waste (from a process that accepts wastes which are listed in this table only) and made up of previously pasteurised and stabilised batches only
19 06 04	digestate from anaerobic treatment of source segregated biodegradable waste (from a process that accepts wastes which are listed in this table only) and made up of previously pasteurised and stabilised batches only
19 06 05	liquor from anaerobic treatment of animal and vegetable waste (from a process that accepts wastes which are listed in this table only) and made up of previously pasteurised and stabilised batches only
19 06 06	digestate from anaerobic treatment of animal and vegetable waste (previously digested sewage sludge only)
19 08	**wastes from waste water treatment plants not otherwise specified**
19 08 09	grease and oil mixture from oil/water separation containing only edible oil and fats
19 08 12	sludges from biological treatment of industrial waste water (from a process that treats wastes which are listed in this table only).
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 12	waste types listed in this table, Table S2.2, that have been subjected to mechanical treatment only (from a process that treats wastes which are listed in this table only).
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 01	paper and cardboard (excluding veneers, plastic coatings or laminates) meeting EN 13432 or equivalent certified compostable or digestible packaging only
20 01 08	biodegradable kitchen and canteen waste containing compostable plastics meeting EN 13432 or equivalent certified compostable or digestible packaging (Category 3 ABPR waste only)
20 01 25	edible oil and fat

20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste
20 03	**other municipal wastes**
20 03 01	mixed municipal waste – only separately collected biodegradable wastes of types listed within this table, Table S2.2
20 03 02	waste from markets – allowed only if source segregated biodegradable fractions e.g. plant material, fruit and vegetables

Table S2.3 Permitted waste types and quantities for anaerobic digestion, subject to pre-operational condition (Table S1.4)	
Maximum quantity	**The total annual throughput of waste in Table S2.2 and S2.3 combined shall not exceed 100,000 tonnes.**
Exclusions	Wastes having any of the following characteristics shall not be accepted: • biodegradable wastes that is significantly contaminated with non-compostable or digestible contaminants, in particular plastic and litter shall be no more than 5% w/w and shall be as low as reasonably practicable by 31 December 2025. • wastes containing wood-preserving agents or other biocides and post-consumer wood • wastes containing persistent organic pollutants • wastes containing Japanese Knotweed or other invasive plant species listed in the Invasive Species (Amendment etc.) (EU Exit) Regulations 2019 • 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. • pest infested waste
Waste code	**Description**
04	**Wastes from the leather, fur and textile industries**
04 01	**wastes from the leather and fur industry**
04 01 01	fleshings and lime split wastes
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 38	wood other than that mentioned in 20 01 37

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
Point A01 on Drawing ETL573/EPR03 August 2022	Exhaust stack odour abatement system	Hydrogen sulphide	No limit set	Average over sample period	Once every 6 months	CEN TS 13649 for sampling NIOSH 6013 for analysis
		Ammonia	20 mg/m^3	Average over sample period	Once every 6 months	EN ISO 21877
		Odour concentration	No limit set	--	Once every 6 months	BS EN 13725
Point A02 on Drawing ETL573/EPR03 August 2022	Emergency pressure relief valve on fermenter tank 1	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point A03 on Drawing ETL573/EPR03 August 2022	Emergency pressure relief valve on fermenter tank 2	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point A04 on Drawing ETL573/EPR03 August 2022	Emergency pressure relief valve on fermenter tank 3	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point A05 on Drawing ETL573/EPR03 August 2022	Emergency pressure relief valve on post fermenter tank	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point A06 on Drawing ETL573/EPR03 August 2022	Biogas upgrading plant stack vent	VOCs including methane	No limit set	Leak detection and repair (LDAR) programme	In accordance with written management system	BS EN15446
Point A07 on Drawing ETL573/EPR03 August 2022	Emergency flare stack (Waste AD) [note 1]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	150 mg/m^3	Average over sample period	[note 4]	BS EN 14792
		Carbon monoxide	50 mg/m^3			BS EN 15058

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
		Total VOCs	10 mg/m^3			BS EN 12619
Point A08 on Drawing ETL573/EPR03 August 2022	Emergency pressure relief valve on gas upgrading unit	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point A09 on Drawing ETL573/EPR03 August 2022	Dual-fuel Boiler stack [burning biogas and diesel] [note 1]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	200 mg/m^3 [note 3]	Average over sample period	Annual	BS EN 14792
		Sulphur dioxide	100 mg/m^3 [note 3]	Average over sample period	Annual	BS EN 14791 or CEN TS 17021 or by calculation based on fuel sulphur
		Carbon monoxide	No limit set	Average over sample period	Every three years	BS EN 15058
Point A10 on Drawing ETL573/EPR03 August 2022	Emergency pressure relief valve on pre-storage tank 1	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point A11 on Drawing ETL573/EPR03 August 2022	CHP engine stack [note 1]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	500 mg/m^3	Average over sample period	Annual	BS EN 14792
		Sulphur dioxide	350 mg/m^3 [note 2]			BS EN 14791 or CEN TS 17021 or by calculation based on fuel sulphur
		Sulphur dioxide	162 mg/m^3 [note 3]			
		Carbon monoxide	1400 mg/m^3			BS EN 15058

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
		Total VOCs	No limit set [Note 5]			BS EN 12619
Point A12 on Drawing ETL573/EPR03 August 2022	Pressure relief valve GEU	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point A13 on Drawing ETL573/EPR03 August 2022	Emergency Generator	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	No limit set	Average over sample period	Once every 500 hours of operation with a minimum frequency of once every three years	BS EN 14792
		Sulphur dioxide	No limit set			BS EN 14791 or CEN TS 17021 or by calculation based on fuel sulphur
		Carbon monoxide	No limit set			BS EN 15058
Point A14 on Drawing ETL573/EPR03 August 2022	Emergency pressure relief valve on Digester 1	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point A15 on Drawing ETL573/EPR03 August 2022	Emergency pressure relief valve on Digester 2	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point A16 on Drawing ETL573/EPR03 August 2022	Emergency pressure relief valve on Post-Digester	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point A17 on Drawing ETL573/EPR03 August 2022	Crop Digestate storage lagoon vents (x2)	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point A18 on Drawing	Waste Digestate storage lagoon vents (x12)	Biogas release and	No limit set	Recorded duration	Daily inspection	--

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
ETL573/EPR03 August 2022		operational events		and frequency		
Point A19 on Drawing ETL573/EPR03 August 2022	Emergency flare stack (Crop AD) [note 1]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	150 mg/m^3	Average over sample period	[note 4]	BS EN 14792
		Carbon monoxide	50 mg/m^3			BS EN 15058
		Total VOCs	10 mg/m^3			BS EN 12619
Point A20 on Drawing ETL573/EPR03 August 2022	Leachate storage tank vents – Crop AD (x2)	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--

Note 1 – 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 emergency flares and medium combustion plants other than engines and gas turbines burning biogas such as boilers).

Note 2 – This emission limit applies until 31 December 2029, unless the gas engine is replaced.

Note 3 – This emission limit applies from 1 January 2030, unless otherwise advised by the Environment Agency.

Note 4 – Following commissioning, monitoring to be undertaken in the event the emergency flare has been operational for more than 10 per cent of a year (876 hours). Record of operating hours to be submitted annually to the Environment Agency.

Note 5 – Monitoring requirements to be reviewed by the Environment Agency 12 months from permit issue.

Table S3.2 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
Digester feed (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. Gas monitors to be calibrated every 6 months or in accordance with the manufacturer's recommendations
	Methane	Continuous	None specified	
	CO_2	Continuous	None specified	
	O_2	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.	As described in site operating techniques	--
	Ammonia			
Digesters and storage tanks	Integrity checks	Weekly	Visual assessment	In accordance with design specification and tank integrity checks.
Digesters	Agitation /mixing	Continuous	Systems controls	Records maintained in daily operational records.
	Tank capacity and sediment assessment	Once every 5 years from date of commission	Non-destructive pressure testing integrity assessment	In accordance with design specification and tank integrity checks.

			every 5 years or as specified by manufacturers technical specification.	
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	BS EN 15446 In accordance with the LDAR programme	Monitoring points as specified in a DSEAR risk assessment and LDAR programme. Limit as agreed with the Environment Agency as a percentage of the overall gas production.
CHP engine stack	VOCs including methane	Annually	BS EN 12619	Total annual VOCs emissions from the CHP engine 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	Conditions to be recorded in operational diary and records. Equipment shall be calibrated on a 4 monthly basis, in accordance with manufacturer's recommendations

				or as agreed in writing by the Environment Agency.
Emergency flares	Operating hours	Continuous	Recorded duration and frequency. Recording using a SCADA system or similar system	Date, time and duration of use of auxiliary flare shall be recorded.
	Quantity of gas sent to emergency flare			Quantity can be estimated from gas flow composition, heat content, ratio of assistance, velocity, purge gas flow rate, pollutant emissions.
Pressure relief valves and vacuum systems	Gas pressure	Continuous	Recording using a SCADA system	Continuous gas pressure shall be monitored.
	Re-seating	Weekly inspection	Visual	Operator must ensure that valves are re-seated after release in accordance with the manufacturer's design.
	Inspection, maintenance, calibration, repair and validation	Following foaming or overtopping or at 3 yearly intervals whichever is sooner	Written scheme of examination in accordance with condition 1.1.1	After a foaming event or sticking, build-up of debris, obstructions or damage, operator must ensure that pressure relief valve function remains within designed gas pressure in accordance with the manufacturer's design by suitably trained and qualified personnel.
	Inspection, calibration and validation report	In accordance with design and construction specifications or after over topping or foaming event	Written scheme of examination in accordance with condition 1.1.1	Operator must ensure that valves are re-seated after release, after a foaming event or sticking, build-up of debris, obstructions or damage.

				Operator must ensure that PRV function remains within designed operation gas pressure in accordance with the manufacturer's design by suitably trained/qualified personnel. Inspection, calibration and validation report. In accordance with industry Approved Code of Practice
Storage lagoons and storage tanks	Volume	Daily	Visual or flow metre measurement	750 mm freeboard must be maintained for storage lagoons. Records of volume must be maintained.
Carbon filter (CentriAir odour abatement)	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. Carbon filter(s) to be replaced in accordance with manufacturer's recommendations. Equipment shall be calibrated on a 4 monthly basis, or as agreed in writing by the Environment Agency.
	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)	
	Hydrogen sulphide – inlet and outlet gas stream	Every 6 months or as agreed in writing by the Environment Agency.	CEN TS 13649 for sampling NIOSH 6013 for analysis	Action levels to be agreed on completion of IC5 as approved in writing by the Environment Agency.

				Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
	Ammonia – inlet	Every 6 months or as agreed in writing by the Environment Agency.	EN ISO 21877	Action levels to be agreed on completion of IC5 as approved in writing by the Environment Agency. 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 IC5 as approved in writing by the Environment Agency. 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.

Table S4.1 Reporting of monitoring data

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air from odour abatement plant Parameters as required by condition 3.5.1.	A01	Every 6 months	1 January, 1 July
Emissions to air from CHP engine Parameters as required by condition 3.5.1.	A07, A09, A11, A19	Every 12 months	1 January
Process monitoring – digester tank integrity Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 5 years from the date of commissioning or as per the manufacturer's recommendation, whichever is sooner	1 January
Process monitoring – under and over pressure relief systems Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 12 months Yearly summary report of over-pressure and under-pressure events detailing mass balance release	1 January
Process monitoring – leak detection and repair (inspection, calibration and maintenance) Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 3 years	1 January
Process monitoring – use of emergency flare Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 12 months	1 January
Non-compostable contamination removal efficiency Parameters as required by conditions 2.3.4 and 2.3.7	--	Every 12 months Yearly report of detailing contamination removal efficiency and progress with plastic reduction contamination	
Total annual VOCs emissions from gas engines (calculated)	As specified in schedule 3 table S3.4	Every 12 months	1 January

Table S4.2 Annual production/treatment	
Parameter	**Units**
Electricity generated	MWh
Biomethane generated	tonnes or m^3
Whole digestate	tonnes
Liquid digestate	tonnes or m^3
Solid digestate	tonnes
Recovered outputs	tonnes

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	tonnes or m^3
Energy usage	Annually	MWh
Raw material usage	Annually	tonnes or m^3
Emergency flare operation	Annually	hours
Electricity exported	Annually	MWh
Biomethane exported	Annually	tonnes or m^3
CHP engine usage	Annually	hours
CHP engine efficiency	Annually	%
Auxiliary boiler usage	Annually	hours

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Air	Form air 1 or other form as agreed in writing by the Environment Agency	29/09/2022
Process monitoring	Form process 1 or other form as agreed in writing by the Environment Agency	29/09/2022
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	29/09/2022
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	29/09/2022
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	29/09/2022
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	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

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

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

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

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

Part B – to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

“accident” means an accident that may result in pollution.

“ADQP” means Anaerobic Digestion Quality Protocol

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

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

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

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

“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_2, H_2O, 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. Further guidance ‘RGN2: Understanding the meaning of regulated facility Definition of regulated facility’ is available.

“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.

“competent persons and resources” means that a technically competent person accredited to a relevant scheme must attend site and record their attendance, and that all roles and responsibilities are clearly stated in the management systems along with records of operatives’ training. See the guidance on the level of competence and duration of attendance

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

‘compostable plastics’ means waste containing packaging or non-packaging items (or both) with a valid certificate of conformity to EN 13432 or an equivalent standard for compostable and digestible items, the certificate issued by an independent certification body capable of fully biodegrading by a biological process to create compost or digest.

“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, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“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, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“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 adequate 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 55^0C, during which biological processes, together with conditions in the composting mass, eradicate human and animal pathogens or reduce them to acceptably low levels. The operator also needs to meet ABPR requirements.

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

a) no liquids will run off the surface otherwise than via the system
b) 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 venner).

“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, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

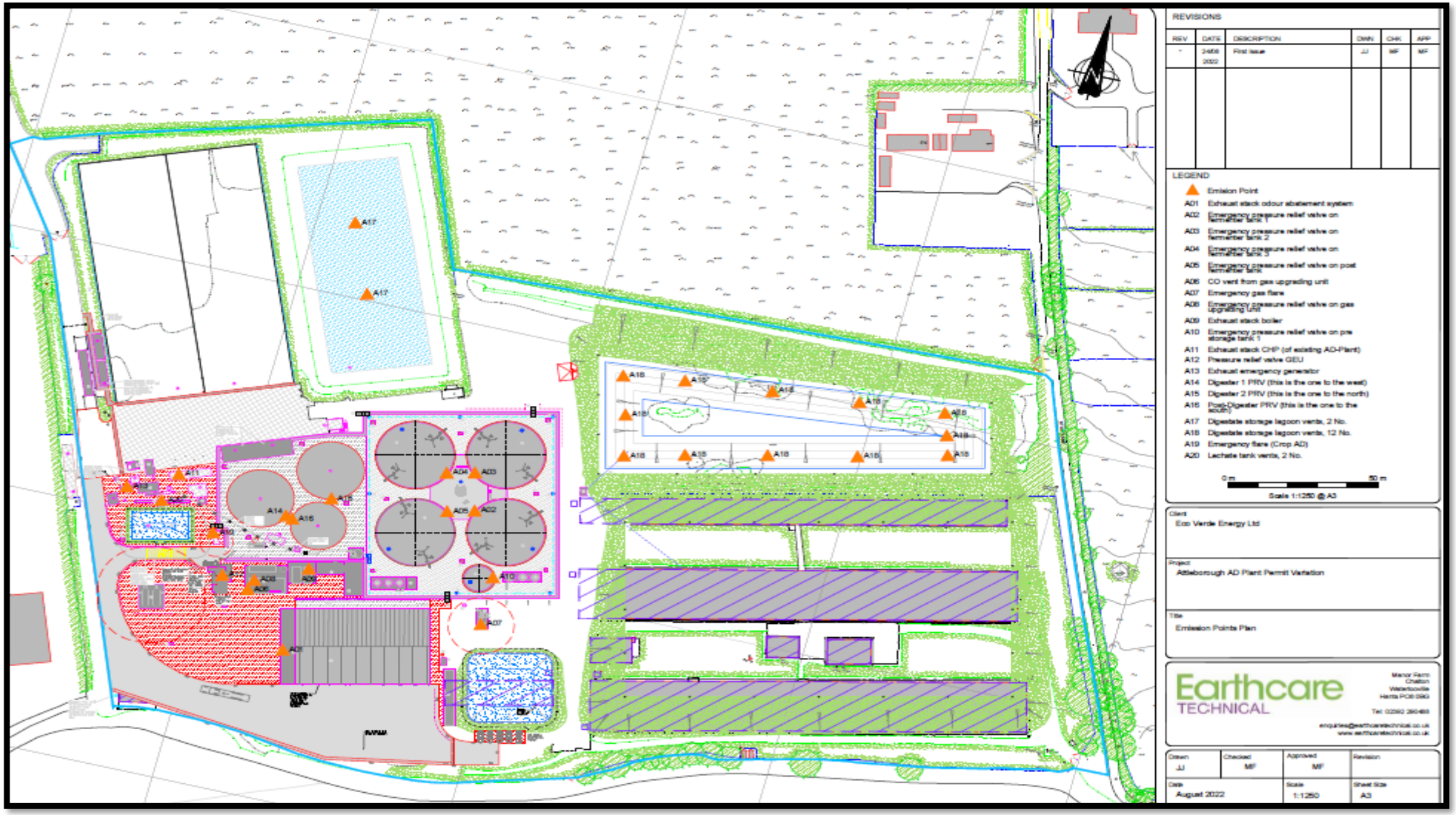
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

a) 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
b) 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



Site Location Plan 1

Not to Scale

Site Location Plan 2

Not to Scale

1:2500 - DRAWING SCALE REFERENCE (m)

50 25 0 25 50 75 100 125

Key

Site Boundary (Area - 67,594.50m² / 6.75945 Ha)

Land Registry Land Divisions

APPROVAL & COMMENT

Rev	Date	Rev By	Chkd	Description
E	22-07-21	AF	OAJ	Site Boundary Amended
D	13-07-21	AF	OAJ	Minor Amendments
C	30-04-21	JHB	OAJ	Minor Amendments
B	13-01-20	MJP	OAJ	Client Name Amended
A	10-01-20	MJP	OAJ	Second Issue
0	26-07-19	-	OAJ	First Issue

plandescil
consulting engineers

Connaught Road Attleborough Norfolk NR17 2BW
Telephone: (01953) 452001 Fax: (01953) 456955
E-mail: pdc@plandescil.co.uk www.plandescil.co.uk

civil / structural / environmental / surveying

Client

Attleborough AD Plant Limited

Project

Attleborough AD Plant,
Attleborough, Norfolk,
NR17 1AE

Drawing Title

Site Location Plan

Scale U.N.O.	Date	Drawn By
As Noted (A3)	July 2019	MJP

Drawing No. 24727/150 Rev E

Annex 1 of MCP

1. Rated thermal input (MW) of the medium combustion plant.	CHP engine – 1,560 kWe (3,786 kWth) Back-up boiler – 560 kWe output (609 kWth) Emergency generator – 220 kWe (530 kWth)
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	CHP engine – biogas-fired engine Back-up boiler – dual fuel: red diesel during commissioning and thereafter biogas Emergency generator – diesel engine
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	CHP engine – Waste derived biogas termed as 'Gaseous fuel other than natural gas' in Annex II of the MCPD. Back-up boiler – Waste derived biogas termed as 'Gaseous fuel other than natural gas' and 'Liquid fuels other than gas oil' in Annex II of the MCPD Emergency generator – 'Liquid fuels other than gas oil' in Annex II of the MCPD
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.	CHP engine – pre-20 December 2018 Back-up boiler – 2022 Emergency generator - 2022
5. Sector of activity of the medium combustion plant or the facility in which it is applied (NACE code.	35.11 Production of electricity
6. Expected number of annual operating hours of the medium combustion plant and average load in use.	CHP engine – 8,000 hours, 92% average load Back-up boiler – <500 hours per year, 100% load Emergency generator – as required for emergency backup, else 1 hour/month testing – 12 hours/year up to full load
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.	N/A
8. Name and registered office of the operator and, in the case of stationary medium combustion plants, the address where the plant is located.	Operator name: Eco Verde Energy Ltd Registered office: The Old School High Street, Stretham, Ely, CB6 3LD Site address: Ellingham Road, Attleborough, Norfolk, NR17 1AE

END OF PERMIT