Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Swancote Energy Limited

Swancote Farm
Swancote
Bridgnorth
Shropshire
WV15 5HB

Variation application number

EPR/TP3692EU/V007

Permit number

EPR/TP3692EU

Swancote Farm
Permit number EPR/TP3692EU

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.

The installation is an anaerobic digestion facility which treats biodegradable waste under Section 5.4 Part A(1)(b)(i)) of the Environmental Permitting Regulations 2016 as follows: 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.

Currently the permitted facility comprises of a de-packaging plant for food waste and an anaerobic digestion operation with combustion of the resultant biogas in three combined heat and power (CHP) biogas engines and upgrading of biogas to biomethane. The maximum tonnage of food waste currently permitted is 75,000 tonnes per annum.

The changes authorised by this variation are:

- addition of back-up boiler (thermal input 1 MW);
- increase in annual throughput of waste from 70,000 to 120,000 tonnes;
- re-location of Liquid Feedstock Tank 1 (LFT1);
- addition of Solid Feeder 3 equipped with a lid and carbon filter abatement;
- addition of a ByoFlex N Stripping system to balance ammonium levels in Digester 6;
- addition of a carbon capture unit; and
- removal of an existing emission point (W1) as there are no existing discharges to surface water.

The operator seeks to directly replace a proportion of the current tpa of maize energy crops used. The additional waste will comprise of up to 25,000 tpa of chicken manure and 20,000 tpa of liquid waste. The chicken manure will be received on a just in time basis to Solid Feed Hopper 3 which is equipped with a lid and carbon filter to abate potential ammonia emissions. The additional liquid waste will be dispatched into Liquid Feed Tank 2 (LFT2) via delivery tankers via a direct pipe connection.

The ByoFlex N stripping system will enable nitrogen-rich poultry manure to be fed to Digester 6 without adding water to the system. The closed loop system allows the continual part removal of ammonium from the digester contents and its return (stripped of ammonium) back into the digester to dilute the fresh poultry manure feedstock as it is fed. This avoids ammonium inhibition to the AD process.

The site is located directly south of the A454 running between Bridgnorth approximately 2.5 km to the west and Wolverhampton 18 km to the east. The site is located within a rural location in the small settlement of Swancote. There are two local wildlife sites and an Ancient Woodlands within 2 km of the site.

The schedules specify the changes made to the permit.

Status log of the permit		
Description	**Date**	**Comments**
Application EPR/TP3692EU/A001	Duly made 15/04/2011	Application for an on-farm anaerobic digestion facility, with the use of the resultant biogas in a combined heat and power generation unit.
Permit determined	01/09/2011	Permit issued to Swancote Energy Limited.
Application EPR/TP3692EU/V002 (variation)	Duly made 22/12/2011	Application to vary the permit to include additional waste types and increase the site area.
Variation determined EPR/TP3692EU	02/03/2012	Varied permit issued to Swancote Energy Limited.
Application EPR/TP3692EU/V003 (variation)	Duly made 22/12/2011	Application to vary the permit to change to a new prescribed activity. This application was withdrawn.
Application EPR/TP3692EU/V0074 (variation and consolidation)	Duly made 24/07/2015	Application to vary and update the permit to modern conditions, become an installation activity, and insert additional emission point to air and surface water.
Additional Information	19/10/2015	Response to Schedule 5 – clarifying and modelling emissions.
Additional Information	02/11/2015	Response to Schedule 5 – re-running part of the model and clarifying the modelling conclusions.
Variation determined EPR/TP3692EU (Billing Ref: XP3633RA)	09/11/2015	Varied permit and consolidated permit issued in modern condition format to Swancote Energy Limited.
Regulation 61 Notice sent to Operator	20/01/2020	Regulation 61 Notice requiring information for statutory review of permit.
Regulation 61 Notice response	24/03/2021	Response received from the operator.
Application EPR/TP3692EU/V007 (variation and consolidation)	Environment Agency Initiated Variation	Statutory review of permit occasioned by Waste Treatment BAT Conclusions published on 17 August 2018.
Environment Agency Biowaste Treatment Sector Review Permit reviewed Variation determined EPR/TP3692EU (Billing Ref: FP3902LR)	04/10/2022	Varied and consolidated permit issued.
Application EPR/TP3692EU/V006 (variation and consolidation)	Duly made 22/01/2024	Application to vary the permit to include additional infrastructure and extend the permit boundary.
Additional information received	02/02/2024 07/02/2024	Responses to email request for further information dated 01/02/2024.
Additional information received	13/0220/24	Responses to email request for further information dated 08/02/2024.
Additional information received	15/02/2024	Responses to email request for further information dated 15/02/2024.
Additional information received	14/03/2024	Response to Schedule 5 Notice dated 07/03/2024.
Additional information received	21/03/2024	Provision of Inspection and Maintenance Schedule for the digestate lagoon.

Status log of the permit		
Description	**Date**	**Comments**
Additional information received	27/03/2024	Responses to email request for further information dated 26/03/2024.
Additional information received	02/05/2024	Responses to email request for further information dated 02/05/2024.
Variation issued EPR/TP3692EU/V006	27/06/2024	Varied and consolidated permit issued.
Application EPR/TP3692EU/V008	Duly made 27/06/2025	Application to add standard rule set SR2024 No 1 to permit.
Additional Information received	14/07/2025	Response to email request 03/07/2025.
Application EPR/TP3692EU/V007 (variation and consolidation)	Duly made 17/07/2025	Application to vary the permit to include additional infrastructure.
Variation determined EPR/TP3692EU	30/07/2025	Notice of variation issued. Standard rule set SR2024 No 1 added to Permit.
Additional information received	15/09/2025	Response to email request dated 12/09/2025.
Additional information received	06/10/2025	Response to Schedule 5 Notice dated 17/09/2025.
Additional information received	20/10/2025	Response to email request for further information dated 17/10/2025 for Air Quality Impact Assessment.
Additional information received	27/10/2025	Response to email request for further information dated 23/10/2025 for Air Quality Impact assessment.
Additional information received	12/02/2026	Response to email request 09/02/2026.
Additional information received	19/03/2026	Response to the email request for further information dated 19/03/2026 regarding comments on the draft permit.
Variation determined EPR/TP3692EU	27/03/2026	Varied permit issued to Swancote Energy Limited.

End of introductory note

Notice of variation

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/TP3692EU

Issued to

Swancote Energy Limited ("the operator")

whose registered office is

Tudor House,
37a Birmingham New Road,
Wolverhampton,
WV4 6BL

company registration number **07322505**

to operate a regulated facility at

Swancote Farm
Swancote
Bridgnorth
Shropshire
WV15 5HB

to the extent set out in the schedules.

Under regulation 27(2) of the Regulations, standard rules number 'SR2024 No 1: research and development at a Part A(1) installation' are conditions of this permit.

The notice shall take effect from 27/03/2026.

Name	Date
Jack Robinson, Principal Permitting Team Leader	**27/03/2026**

Authorised on behalf of the Environment Agency

Schedule 1

The following conditions were varied as a result of the application made by the operator:

- Table S1.1, as referenced in conditions 2.1.1 and 2.3.8 has been amended to include new directly associated activities AR11 (Recovery of carbon dioxide) and AR12 (Storage of recovered liquid carbon dioxide) and to update AR1 and AR4 to include new infrastructure.

- Table S1.2, as referenced in conditions 2.3.1 and 2.3.2, has been varied to include operating techniques submitted as part of this variation application (V007).

- Table S2.2, as referenced in condition 2.3.4, has been amended to add a description to the persistent organic pollutants (POPs) as an exclusion.

- Table S1.3, referenced in condition 2.4.1. has been amended to add a new improvement condition (IC8) and mark IC4, IC5 and IC7 as complete.

- Table S3.1, as referenced in conditions 3.1.1, 3.5.1 and 3.5.4 has been amended to add new emission points and re-name existing emission points.

- Table S3.2, as referenced in condition 3.5.1, has been amended to update the wording with respect to odour abatement action levels.

- Table S4.2, as referenced in condition 4.2.2, has been amended to include CO_2 generated as a new reporting parameter.

- Table S4.1, as referenced in condition 4.2.3, has been amended to add new emission points and re-name existing emission points.

- Schedule 6, as referenced in condition 4.4.1, has been amended to include the interpretation of '*POPs Regulations'.*

- Schedule 7, referenced in condition 2.2.1, has been amended to include updated site plans submitted in this variation application (V007).

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/TP3692EU

This is the variation to a consolidated environment permit for application EPR/TP3692EU/V007 authorising,

Swancote Energy Limited ("the operator"),

whose registered office is

Tudor House
37a Birmingham New Road
Wolverhampton
WV4 6BL

company registration number 07322505

to operate an installation at

Swancote Farm
Swancote
Bridgnorth
Shropshire
WV15 5HB

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

Name	Date
Jack Robinson, Principal Permitting Team Leader	**27/03/2026**

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

(a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and

(b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.1.4 The operator shall comply with the requirements of an approved competence scheme.

1.2 Energy efficiency

1.2.1 The operator shall:

(a) take appropriate measures to ensure that energy is used efficiently in the activities;

(b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and

(c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

1.3.1 The operator shall:

(a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;

(b) maintain records of raw materials and water used in the activities;

(c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and

(d) take any further appropriate measures identified by a review.

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

1.4.1 The operator shall take appropriate measures to ensure that:

(a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and

(b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and

(c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

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

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

2.1.3 All process plant and equipment shall be commissioned, operated and maintained and shall be fully documented and recorded in accordance with the manufacturer's recommendations.

2.1.4 Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

2.2 The site

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

2.3 Operating techniques

2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.

2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

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

2.3.4 Waste shall only be accepted if:

(a) it is of a type and quantity listed in schedule 2 table S2.2 and;

(b) it conforms to the description in the documentation supplied by the producer and holder.

(c) the facility has sufficient free capacity to store and treat the waste.

2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:

(a) the nature of the process producing the waste;

(b) the composition of the waste;

(c) the handling requirements of the waste;

(d) the hazardous property associated with the waste, if applicable; and

(e) the waste code of the waste.

2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

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

2.3.8 For the following activities referenced in schedule 1, table S1.1 (AR4):

(a) each MCP must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this.

(b) the operator must keep periods of start-up and shut-down of each MCP as short as possible.

(c) there must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993.

2.4 Improvement programme

2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

3 Emissions and monitoring

3.1 Emissions to water, air or land

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

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

3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;

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

3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

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

3.3 Odour

3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

3.4 Noise and vibration

3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

3.4.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;

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

3.5 Monitoring

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

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

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

3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

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

3.5.5 In the case of new medium combustion plant, the first monitoring measurements shall be carried out within four months of the issue date of the permit or the date when the MCP is first put into operation, whichever is later.

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

3.6 Pests

3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.

3.6.2 The operator shall:

(a) only use approved products for pest control;

(b) treat pest infestations promptly;

(c) reject pest-infected incoming waste;

(d) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;

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

3.7 Fire prevention

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

3.7.2 The operator shall:

a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;

b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

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

4 Information

4.1 Records

4.1.1 All records required to be made by this permit shall:

(a) be legible;

(b) be made as soon as reasonably practicable;

(c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and

(d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:

(i) off-site environmental effects; and

(ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

(a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;

(b) the annual production/treatment data set out in schedule 4 table S4.2; and

(c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

(a) in respect of the parameters and emission points specified in schedule 4 table S4.1;

(b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and

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

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

4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.2.6 The operator shall keep records of non-waste materials leaving the site, including the type of material, the batch number, the date of export off-site and the tonnage exported on that date. These records shall be maintained for at least 2 years.

4.2.7 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

4.3.1 In the event:

(a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

(i) inform the Environment Agency,

(ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and

(iii) take the measures necessary to prevent further possible incidents or accidents;

(b) of a breach of any permit condition the operator must immediately—

(i) inform the Environment Agency, and

(ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;

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

4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.3 Following the detection of an issue listed in condition 4.3.1, the operator shall review and revise the management system and implement any changes as necessary to minimise the risk of reoccurrence of the issue.

4.3.4 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.5 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

(a) any change in the operator's trading name, registered name or registered office address; and

(b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

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

(a) any change in the operator's name or address; and

(b) any steps taken with a view to the dissolution of the operator.

In any other case:

(a) the death of any of the named operators (where the operator consists of more than one named individual);

(b) any change in the operator's name(s) or address(es); and

(c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.6 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

(a) the Environment Agency shall be notified at least 14 days before making the change; and

(b) the notification shall contain a description of the proposed change in operation.

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

4.3.8 The operator shall notify the Environment Agency as soon as is practicable, in writing of any change of the medium combustion plant.

4.4 Interpretation

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

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

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 waste through to digestion and recovery of by-products (digestate). Anaerobic digestion of waste in six digesters followed by burning of biogas produced from the process. ByoFlex N Stripping system installed to balance ammonium levels within Digester 6. Waste types suitable for acceptance are limited to those specified in Table S2.2.
	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 to pre-treatment and despatch for anaerobic digestion on site. Storage of residual wastes from pre-treatment to despatch off-site for recovery. Storage of waste in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with sealed drainage. Waste types suitable for acceptance are limited to those specified in Table S2.2.
AR3	Physical treatment for the purpose of recycling	R3: Recycling/reclamation of organic substances which are not used as solvents	From the receipt of waste to despatch for anaerobic digestion or despatch off site for recovery.

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**
			Pre-treatment of waste in enclosed building fitted with appropriate odour abatement and on impermeable surface with sealed drainage system including de-packing, shredding, sorting, screening, compaction, baling, mixing and maceration. Post-treatment of digestate in an enclosed building fitted with appropriate odour abatement and 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 four 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.
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 three combined heat and power (CHP) engines with an aggregated thermal input of 7.8 MW.

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**
			Combustion of biogas in one auxiliary boiler with a thermal input of 1 MW. Electrical energy production via heat recovery from CHP engines 1 and 2 exhausts through a 160kWe Organic Rankine Cycle turbine.
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 one auxiliary flare required only during periods of breakdown or maintenance of the CHP engines.
AR6	Raw material storage	Storage of raw materials including lubrication oil, antifreeze, propane, ferric chloride, activated carbon, diesel.	From the receipt of raw materials to despatch for use within the facility.
AR7	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.
AR8	Digestate storage	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	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 one lagoon. Storage of processed uncertified solid digestate 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**
			the Separator Building and on an impermeable surface with a sealed drainage system.
AR9	Air treatment	Collection and treatment of air from the buildings or plant using abatement system (chemical scrubbers and, carbon filters) prior to release to atmosphere.	From the collection of air from site processes to treatment and release of treated air to atmosphere.
AR10	Gas upgrading	Upgrading of biogas to biomethane (including the removal of moisture and other substances such as carbon dioxide, hydrogen sulphide, volatile organic compounds and siloxanes) for injection into the National Grid.	From the receipt of biogas produced at the on-site anaerobic digestion process to storage of biomethane prior to removal via a biomethane dispenser and gas tankers to an off-site National Grid injection point. This includes return of off-specification biogas for combustion to the on-site CHP engines and/or standby flare.
AR11	Recovery of carbon dioxide (CO_2)	Recovery of CO_2 removed during the biogas upgrading process to produce a final food grade product. Liquefaction of CO_2 involving compression, cooling, drying and distillation resulting in the production of liquid CO_2.	From the receipt of biogas produced at the on-site anaerobic digestion process to the recovery of liquid CO_2. This includes the separation of CO_2 and methane (CH_4) in the biogas upgrading unit. CH_4 separated is compressed and stored prior to dispatch from the site via Virtual Pipeline (gas tankers to a Grid Injection Point). This includes return of off-specification biogas for combustion to the on-site CHP engines and/or standby flare or auxiliary boiler.
AR12	Storage of recovered liquid carbon dioxide (CO_2)	Storage of recovered liquid CO_2 food grade product.	Storage of recovered CO_2 in 50t CO_2 storage vessels pending removal off site via a filling station.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	The response to section 3a of Part B4 of the application form – technical standards and operating techniques.	15/04/2011
Response to Schedule 5 Notice dated 10/06/11	All documents, and subsequent revisions, supplied in response to the Schedule 5 notice.	14/07/2011, 28/07/2011, 29/07/2011, 08/08/2011, 11/08/2011, 24/08/2011 and 25/08/2011
Response to Schedule 5 Notice dated 10/06/11	Table 1 Odour Risk Assessment and Management Plan Version 4, dated 24 Aug 2011.	24/08/2011
Application (variation V002)	The response to question 3 of Part C4 of the application form – operating techniques and technical standards.	22/12/2011
Application (variation V004)	The response to question 3 of Part C4 of the application form – operating techniques and technical standards.	24/07/2015
Response to Regulation 61 Notice dated 20/01/2020	• Annex 1 Returns Spreadsheet Compliance and operating techniques identified in response to BAT Conclusions 1 to 8, 10 to 24 and 33 to 38 in the Waste Treatment BREF published on 17 August 2018.	Received 24/03/2021
Application (variation V006)	The response to question 3 of Part C3 of the application form – operating techniques and technical standards Non-Technical Summary v1.1 dated 18/01/2024, excluding: • all references to carbon capture technology • the following sections: 1; 2; 3; 8.4	22/01/2024
Response to Schedule 5 Notice dated 07/03/2024	Odour Management Plan v9 dated 04/03/2024	
Response to email requesting further information dated 13/03/2024	Inspection and Maintenance schedule of Digestate Storage Lagoon, 19/03/2024	21/03/2024
Variation application EPR/TP3692EU/V007	The response to question 3 of Part C3 of the application form – operating techniques and technical standards: Biological waste treatment: appropriate measures for permitted facilities- Biological waste treatment: appropriate measures for permitted facilities,25 No 2024 BAT Addendum produced to support this application (Ref: ETL930_ BAT Addendum V2.0 Issue 28.03.2025)	Duly made 17/07/2025
Additional information requested 03/07/2025	Response to questions: • Risk assessment and secondary containment related to LFT 1 • Monitoring compliance - confirmation on monitoring onsite is undertaken in accordance with MCERTS standards. • Emission point plan update • Process flow diagram	14/07/2025

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Response to Schedule 5 Notice 17/09/2025	• Accident Management Plan v.1 October 25 • Carbon Capture operation-TAB 3 Operating manual CO2 Liquefaction plan,1 0-02-202 received on 17/09/2025 • Operator confirmation of no discharges to surface water from site.	06/10/2025
Additional information requested on 17/10/2025	• Updated NTS V2.0 Issue October/2025 • Updated BAT V2.0 Issue 2.0 25.10.2025 • Updated Environmental Risk Assessment • Odour Management Plan version v11.1 October/2025	20/10/2025
Additional Information requested 09/02/2026	Volume calculations for Air Quality Impact Assessment	12/02/2026

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
Improvement condition for primary containment		
IC1	The operator shall submit a written 'primary containment plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of an inspection and program of works undertaken by a qualified engineer, and shall assess the extent design specification and condition of primary containment systems where polluting liquids and solids are being stored, treated, and/or handled. The plan shall include: • an assessment of the physical condition of all primary containment systems (storage and treatment vessels) using a Written Scheme of Examination and their suitability for providing primary containment when subjected to the dynamic and static loads caused by catastrophic tank failure; • a program of works with timescales for the implementation of individual improvement measures necessary to demonstrate that the primary containment is fit for purpose or alternative appropriate measures to ensure all polluting materials will be contained on site; and • a preventative maintenance and inspection regime The plan shall be implemented in accordance with the Environment Agency's written approval.	Completed
Improvement condition for secondary containment design		
IC2	The operator shall submit a written 'secondary and tertiary containment plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of an inspection and program of	Completed

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
	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 secondary and tertiary containment systems where all polluting liquids and solids are being stored, treated, and/or handled. The inspection shall consider, but not be limited to, the storage vessels, bunds, loading and unloading areas, transfer pipework/pumps, temporary storage areas, and liners underlying the site. The plan shall include: • an assessment of the physical condition of all secondary and/or tertiary containment systems, using a Written Scheme of Examination and their suitability for providing containment when subjected to the dynamic and static loads caused by catastrophic tank failure; • a program of works with timescales for the implementation of individual improvement measures necessary for the secondary and/or tertiary containment systems to comply with CIRIA C736 (2014) guidance, or equivalent. • a preventative maintenance and inspection regime The plan shall be implemented in accordance with the Environment Agency's written approval.	
Improvement condition for operational storage capacity		
IC3	The operator shall provide a written "digestate 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: • 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 outputs, taking into account their permits and capacity constraints. The plan shall be implemented in accordance with the Environment Agency's written approval.	Completed
Improvement condition for review of effectiveness of abatement plant		
IC4	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:	Completed

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
	• 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 • 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 review of abatement plant design		
IC5	The operator shall submit to the Environment Agency a written review report of the design details of the site ventilation system and abatement plant and obtain the Environment Agency’s written approval to it. The report shall include but not limited to: a) Ventilation design performance criteria for effective fugitive odorous emission control b) Design of the abatement systems that will ensure compliance with the odour condition 3.3. The report shall include a demonstration (whether by a detailed review of technical papers or by trial results) that all odorous chemical compounds and their loading rates expected in the relevant air streams have been considered in the design; and supporting evidence that the odorous compounds will be controlled and/or abated either by operating techniques or by the proposed abatement systems. c) Design alarms and triggers for each relevant scenario to alert the operator to the malfunction of both ventilation and abatement systems. The report should further list all relevant contingency mitigation actions to minimise risk of elevated odour pollution from the installation linked to each malfunction scenario and detail the actions to restore systems to normal operating conditions for effective odour control. Ventilation and abatement systems should be designed by suitably qualified named engineers who can supervise and sign-off on construction quality assurance.	Completed
Improvement condition for assessment of methane slip		
IC6	The operator shall establish the methane emissions in the exhaust gas from engines burning biogas and compare these to the manufacturer’s	Completed

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
	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.	
Improvement condition for odour survey and modelling		
IC7	The operator shall: • Carry out an odour survey within the De-packaging Hall • Undertake odour modelling using the results from the survey and including the emissions from the digestate lagoon odour abatement system • Submit a written report to the Environment Agency for assessment and written approval The report must contain: • The results of the odour survey • The results of the odour modelling • Proposals for any necessary improvements to the current odour abatement systems along with timescales for implementation. You must implement the proposals in the report in line with the timescales agreed with the Environment Agency	Completed
Improvement condition for assessing impact of venting of CO_2 from the carbon capture plant		
IC8	The operator shall provide an assessment of the impact of venting, and ensure all relevant procedures are updated to reflect the final commissioned plant. The assessment of the impact of venting, shall include the following: • a description of the different potential venting scenarios including that the whole inventory is vented; • information that shows how modelling has been or is intended to be used to inform the process design and management of the risks associated with venting of CO_2; • confirmation that the design is in line with industry best practice such as that from the Energy Institute, or equivalent; • a description of the operating techniques that will be used to minimise the risks; • a vent management plan setting out how the risks from venting of CO_2 will be managed. An updated accident management plan and site risk assessment that includes the final carbon capture design.	27/09/2026 or otherwise agreed in writing by the Environment Agency

Schedule 2 – Waste types, raw materials and fuels

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

Table S2.2 Permitted waste types and quantities for anaerobic digestion	
Maximum quantity	**Annual throughput shall not exceed 120,000 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 • which contain persistent organic pollutants (POPs) above the thresholds specified within the Persistent Organic Pollutants Regulations 2007 • 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))
02 07 05	sludges from on-site effluent treatment – sludges 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
15	**Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 01	paper and cardboard packaging (excluding veneers, plastic coatings or laminates) certified to EN 13432 or equivalent certified compostable standard
15 01 02	plastic packaging – compostable plastics only certified to EN 13432 or equivalent certified compostable or digestible standard
15 01 03	wooden packaging – virgin timber only
15 01 05	composite packaging meeting EN 13432 or equivalent certified compostable or digestible standard
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 10	glycerol not designated as hazardous i.e. excludes EWC code 19 02 08
19 06	**wastes from anaerobic treatment of waste**

19 06 03	liquor from anaerobic treatment of municipal waste (from a process that 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).
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

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 EP1 on site plan in schedule 7	CHP 3 safety valve & 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
		Total VOCs	No limit set	--	--	BS EN 12619
Point EP2 on site plan in schedule 7	CHP 2 safety valve & 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
		Total VOCs	No limit set			BS EN 12619
Point EP3 on site plan in schedule 7	CHP 1 safety valve & stack	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

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**
		Sulphur dioxide	162 mg/m^3 [note 3]			
		Carbon monoxide	1400 mg/m^3			BS EN 15058
		Total VOCs	No limit set			BS EN 12619
Point EP4 on site plan in schedule 7	Triogen organic rankin cycle safety valve & stack (utilising exhaust emissions from CHP engines 1 and 2)	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	500 mg/m^3	Average over sample period [note 7]	Annual [note 7]	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
		Total VOCs	No limit set			BS EN 12619
Point EP5 on site plan in schedule 7	Channelled emissions such as odour abatement stack or vent(s) – Mavitec Depack air scrubber exhaust [note 6]	Hydrogen sulphide	No limit set	Average over sample period	Once every 6 months	CEN TS 13649 for sampling NIOSH 6013 for analysis
		Odour concentration	1,000 ou_E/m^3	Average over sample period	Once every 6 months	BS EN 13725
		Ammonia	20 mg/m^3	Average over sample period	Once every 6 months	EN ISO 21877
Point EP6 on site plan in schedule 7	Digester 3 safety valve	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point EP7 on site plan in schedule 7	Digester 1 safety valve	Biogas release and operational events	No limit set	Recorded duration and frequency	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**
Point EP8 on site plan in schedule 7	Digester 2 safety valve	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point EP9 on site plan in schedule 7	Carbon filter 1 exhaust - premix 1 & 2 and tanker Bay 1 to LFT1 & LFT2	Hydrogen sulphide	No limit set	Average over sample period	Once every 6 months	CEN TS 13649 for sampling NIOSH 6013 for analysis
		Odour concentration	1,000 ou_E/m^3	Average over sample period	Once every 6 months	BS EN 13725
		Ammonia	20 mg/m^3	Average over sample period	Once every 6 months	EN ISO 21877
Point EP10 on site plan in schedule 7	Digester 4 safety valve	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point EP11 on site plan in schedule 7	Digester 5 safety valve	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point EP12 on site plan in schedule 7	Digester 6 safety valve	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point EP13 on site plan in schedule 7	Pasteuriser 1 safety valve	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point EP14 on site plan in schedule 7	Pasteuriser 2 safety valve	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point EP15 on site plan in schedule 7	Emergency flare exhaust [note 4]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	150 mg/m^3	Average over sample period	[note 5]	BS EN 14792
		Carbon monoxide	50 mg/m^3			BS EN 15058
		Total VOCs	10 mg/m^3			BS EN 12619
Point EP16 on site plan in schedule 7	Biogas upgrading plant	VOCs including methane	No limit set	Average over sample period	Annual	BS EN 12619 or EN ISO 13199

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**
		Vent gas flow rate	No limit set	Average over sample period	Annual	By measurement or calculation. Method to be agreed in writing with the Environment Agency.
Point EP17 on site plan in schedule 7	CO_2 safety valve & stack	Emissions release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
Point EP18 on site plan in schedule 7	Channelled emissions such as odour abatement stack or vent(s) – carbon filter 2 exhaust (Lagoon) (NOT IN USE)	--	--	--	--	--
Point EP19 on site plan in schedule 7	Channelled emissions such as odour abatement stack or vent(s) – Air scrubber 2 exhaust separator building [note 6]	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 EP20 on site plan in schedule 7	ByoFlex 10 exhaust stack	Ammonia	20 mg/Nm^3	Average over sample period	Once every 6 months	EN ISO 21877
Point EP21 on site plan in schedule 7	Solid feeder 3 carbon filter exhaust	Hydrogen sulphide	No limit set	Average over sample period	Once every 6 months	CEN TS 13649 for sampling NIOSH 6013 for analysis
		Odour concentration	1,000 ou_E/m^3	Average over sample period	Once every 6 months	BS EN 13725
		Ammonia	20 mg/m^3	Average over sample period	Once every 6 months	EN ISO 21877

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 EP22 on site plan in schedule 7	New medium combustion plant other than engines and gas turbines burning biogas – boiler stack (1 MW) [note 1]	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	200 mg/m^3	Average over sample period	Annual	In accordance with guidance: Monitoring stack emissions: low risk MCPs and specified generators Published 16 February 2021
		Sulphur dioxide	100 mg/m^3			
		Carbon monoxide	No limit set			
Point EP23 on site plan in schedule 7	Carbon filter 3 exhaust – bag tank	Hydrogen sulphide	No limit set	Average over sample period	Once every 6 months	CEN TS 13649 for sampling NIOSH 6013 for analysis
		Odour concentration	1,000 ou_E/m^3	Average over sample period	Once every 6 months	BS EN 13725
		Ammonia	20 mg/m^3	Average over sample period	Once every 6 months	EN ISO 21877
Point EP24 on site plan in schedule 7	Liquid feed tank 1 safety valve	No parameter set	No limit set	--	--	--
Point EP25 on site plan in schedule 7	Liquid feed tank 2 safety valve	No parameter set	No limit set	--	--	--

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 medium combustion plants other than engines and gas turbines burning biogas).

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

Note 5 – 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 6 – The monitoring of NH_3 and H_2S can be used as an alternative to the monitoring of the odour concentration subject to approval by the Environment Agency.

Note 7 – Emissions monitoring of A4 ORC turbine stack does not need to be undertaken if the monitoring required for A1 CHP engine 1 and 2 stack is undertaken.

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 every 5 years or as specified by manufacturers technical specification.	In accordance with design specification and tank integrity checks.
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 stacks	VOCs including methane	Annually	BS EN 12619	Total annual VOCs emissions from the CHP engines to be calculated and submitted to the Environment Agency.
	Exhaust gas temperature		Traceable to National Standards	

	Exhaust gas pressure		Traceable to National Standards	
	Exhaust gas water vapour content		BS EN 14790-1	Unless gas is dried before analysis of emissions.
	Exhaust gas oxygen		BS EN 14789	
	Exhaust gas flow		BS EN 16911-1	
Meteorological conditions	Wind speed, air temperature, wind direction	Continuous	Method as specified in management system	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 flare	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	750mm freeboard must be maintained for storage lagoons. Records of volume must be maintained.
Odour abatement plant				
Scrubber	Gas temperature – inlet and outlet	Continuous	Temperature probe / Traceable to national standards	Odour abatement plant shall be regularly checked and maintained to ensure appropriate temperature and moisture content. Odour abatement plant shall be managed in accordance with permit condition 3.3, the odour management plan and 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 / EN 16911-1 and MID for EN 16911-1	
	Moisture content or humidity – inlet and outlet (for dry scrubbers only)	Daily	Moisture meter	
	Moisture content or humidity – outlet (for wet scrubbers if used before other abatement systems)	Daily	Moisture meter	
	Back pressure	Weekly	Pressure differential using sensors	
	Efficiency assessment	Annual	Emission removal efficiency (BS EN 13725 for odour removal)	

	pH scrubber solution (pre-abatement)	Continuous	pH meter	
	pH scrubber solution (post-abatement)	Continuous	pH meter	
	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 and 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 and approved in writing by the Environment Agency. Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
Carbon filters	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
	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)	manufacturer's recommendations. Equipment shall be calibrated on a 4 monthly basis, or as agreed in writing by the Environment Agency.
	Hydrogen sulphide – inlet and outlet gas stream	Every 6 months or as agreed in writing by the Environment Agency.	CEN TS 13649 for sampling NIOSH 6013 for analysis	Action levels to be agreed and 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 and 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 and 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 CHP engines, emergency flare and back-up boiler Parameters as required by condition 3.5.1.	EP1, EP2, EP3, EP4 and EP15, EP22	Every 12 months	1 January
Emissions to air from odour abatement plant and ByoFlex plant Parameters as required by condition 3.5.1.	EP5, EP9, EP19, EP20, EP21 and EP23	Every 6 months	1 January, 1 July
Process monitoring – digester tank integrity Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.2	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 S3.2	Every 12 months Yearly summary report of over-pressure and under-pressure events detailing mass balance release	1 January
Process monitoring – pressure relief systems (inspection, calibration and maintenance) Parameters as required by condition 3.5.1	As specified in schedule 3 table S32	Every 3 years	1 January
Process monitoring – leak detection and repair surveys Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.2	Every 12 months LDAR report to be submitted annually	1 January
Process monitoring – use of emergency flare	As specified in schedule 3 table S3.2	Every 12 months	1 January

Parameters as required by condition 3.5.1			
Non-compostable contamination removal efficiency Parameters as required by conditions 2.3.4, 2.3.7 and 4.2.7	--	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 S3.2	Every 12 months	1 January

Table S4.2 Annual production/treatment	
Parameter	**Units**
Electricity generated	MWh
Biomethane generated	tonnes or m^3
CO_2 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	04/10/2022

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Process monitoring	Form process 1 or other form as agreed in writing by the Environment Agency	04/10/2022
Water	Form water 1 or other form as agreed in writing by the Environment Agency	04/10/2022
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	04/10/2022
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	04/10/2022
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	04/10/2022
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.

“bioaerosols action levels” mean the acceptable bioaerosols concentrations at the nearest sensitive receptor, or at an equivalent distance downwind of the biowaste treatment operations, which are attributable to the biowaste treatment operations. The acceptable concentrations are respectively 1000 and 500 CFU m^{-3} for total bacteria and Aspergillus fumigatus. Where these action levels are elevated, the operator must take action to mitigate the impact on sensitive receptors.

“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”.

‘direct discharge’ means discharge to a receiving water body

“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.

"*POPs Regulations*" means the Persistent Organic Pollutants Regulations SI 2007 No.3106. Thresholds for Persistent Organic Pollutants are specified in Identify and classify waste containing persistent organic pollutants published on 19 December 2022 and updated on 8 May 2025".

"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.

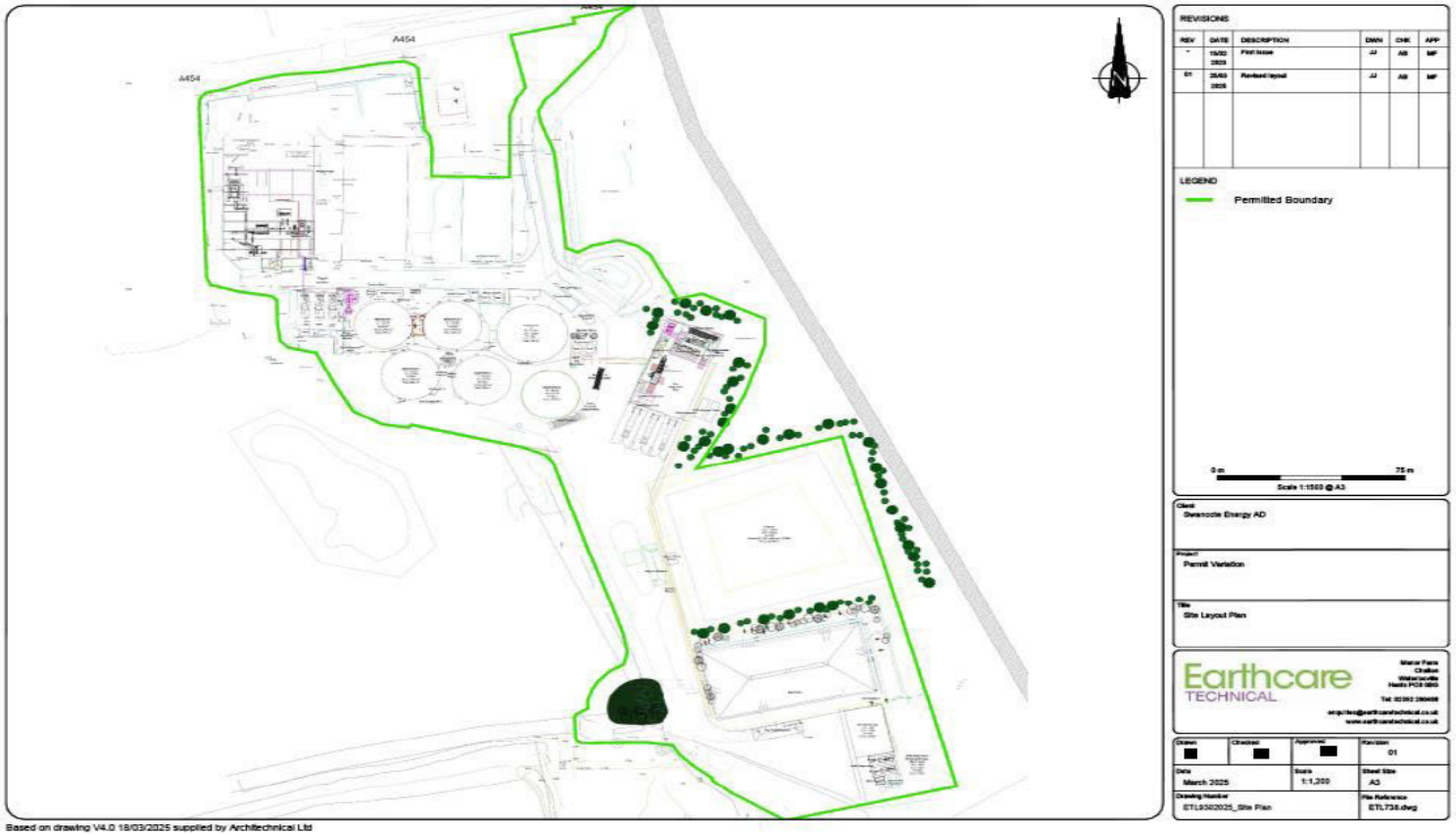
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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.

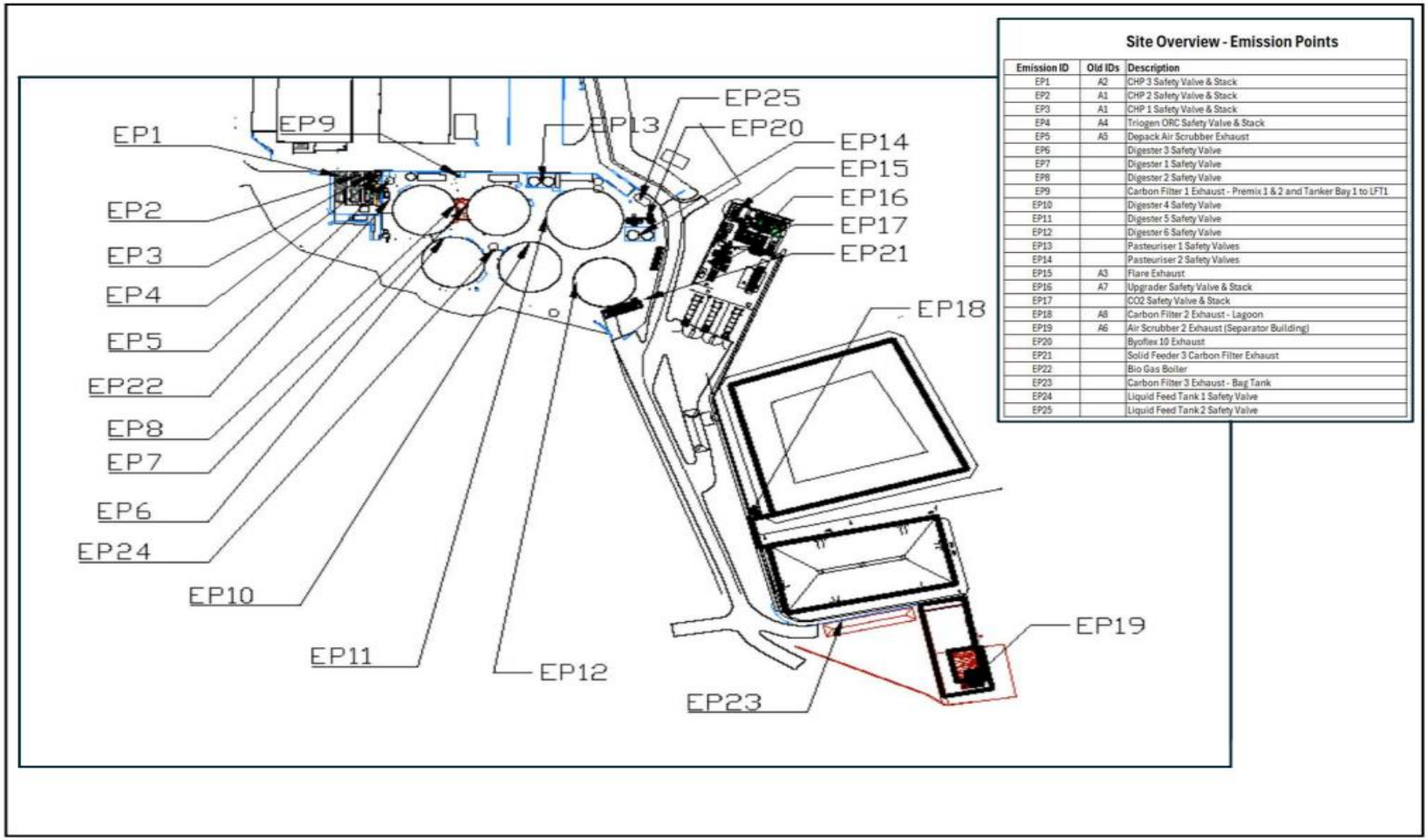
“year” means calendar year ending 31 December.

Schedule 7 – Site plan



Based on drawing V4.0 18/03/2025 supplied by Architechnical Ltd

Emission point plan



Site Overview - Emission Points

Emission ID	Old IDs	Description
EP1	A2	CHP 3 Safety Valve & Stack
EP2	A1	CHP 2 Safety Valve & Stack
EP3	A1	CHP 1 Safety Valve & Stack
EP4	A4	Triogen ORC Safety Valve & Stack
EP5	A5	Depack Air Scrubber Exhaust
EP6		Digester 3 Safety Valve
EP7		Digester 1 Safety Valve
EP8		Digester 2 Safety Valve
EP9		Carbon Filter 1 Exhaust - Premix 1 & 2 and Tanker Bay 1 to LFT1
EP10		Digester 4 Safety Valve
EP11		Digester 5 Safety Valve
EP12		Digester 6 Safety Valve
EP13		Pasteuriser 1 Safety Valves
EP14		Pasteuriser 2 Safety Valves
EP15	A3	Flare Exhaust
EP16	A7	Upgrader Safety Valve & Stack
EP17		CO2 Safety Valve & Stack
EP18	A8	Carbon Filter 2 Exhaust - Lagoon
EP19	A6	Air Scrubber 2 Exhaust (Separator Building)
EP20		Byoflex 10 Exhaust
EP21		Solid Feeder 3 Carbon Filter Exhaust
EP22		Bio Gas Boiler
EP23		Carbon Filter 3 Exhaust - Bag Tank
EP24		Liquid Feed Tank 1 Safety Valve
EP25		Liquid Feed Tank 2 Safety Valve

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END OF PERMIT