Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

SUEZ Recycling and Recovery UK Ltd

Ellington Road Anaerobic Digestion and Composting Facility
Ellington Road
Newmoor
Ashington
Northumberland
NE63 9XS

Variation application number

EPR/UP3494ZL/V007

Permit number

EPR/UP3494ZL

Ellington Road Composting Facility
Permit number EPR/UP3494ZL

Introductory note

This introductory note does not form a part of the notice

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

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

Changes introduced by this variation notice/statutory review

The scope of the changes to the permit cover:

- Removal of In-Vessel Composting (IVC) and associated Directly Associated Activities (DAA)
- Addition of operation of an Anaerobic Digestion (AD) facility and associated Directly Associated Activities (DAA)
- Addition of Combined Heat and Power (CHP) engine which will have a capacity 1.2 MW MCP with a specified generator (SG).As such, it's considered that the CHP engine will be subject to the Medium Combustion Plant Directive (MCPD) and therefore will comprise a MCP with a specified generator (SG).

Brief description of the process

Ellington Road Composting Facility is located approximately 1 km away from Ashington, Northumberland. The site lies partially within the permitted boundary of Ellington Road Landfill site, also operated by SUEZ Recycling and Recovery UK Ltd. The site is located at grid reference 425938,589338. The AD and open windrows composting activities are installation activities under Schedule 1 Part 2 Section 5.4 Part A(1) (b) (i) *Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving biological treatment*.

The Anaerobic Digestion activity has an annual throughput of 100,000 tonnes. Three 7,800m^3 AD tanks would convert organic material to biogas (methane and carbon dioxide). The biogas is captured from the AD tanks and is piped to a biogas upgrading plant to National Gas Grid criteria and injected into the gas grid. Alternatively, the biogas may be processed by the CHP engine to generate heat and electricity that would be used by the AD plant. The material left from the process (digestate) will be subject to the specifications outlined in PAS 110 '.The digestate is processed through a centrifuge where solids are dewatered to a dry solid concentration of approximately 25%. It will be periodically collected and subsequently transferred off site. The facility would provide approximately 10,000 tonnes of digested cake per annum which would be spread to agricultural land as a soil enhancer.

The open-windrow composting activity has an annual throughput of 39,000 tonnes. Green waste from civic amenity sites and kerbside collections is deposited on an external reception area. Waste is shredded and any oversize materials are removed prior to being formed into 400 tonne windrows. The waste is sanitised for a minimum duration of 7 days at temperatures of between 65 – 80°C. The compost will then be stabilised for a minimum duration of 6 weeks. Waste is then screened prior to further maturation. Finished compost grades will then be tested to confirm compliance with the PAS 100 standard.

A further wood waste shredding process occurs on site with an annual throughput of 50,000 tonnes. The site also accepts street cleaning residues for storage in the open windrow composting area. The waste is then exported off site for recovery. This waste operation has an annual throughput of 1,000 tonnes.

All activities take place on areas of impermeable surfaces and sealed drainage. Leachate from processes and site surfaces are collected within lagoons. Only clean site surface water is discharged to Potland Burn. Odour and air emissions from the enclosed processes are controlled by an odour abatement system including a biofilter. These are classed as channelled emissions under the Waste Treatment BREF (2018) and are subject to BAT Associated Emission Limits.

The schedules specify the changes made to the permit.

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

Status log of the permit		
Description	**Date**	**Comments**
Waste Management Licence issued EAWML 64134	11/02/2005	In-vessel composting and open windrows composting licence issued to SITA UK Limited.
Application EPR/UP3494ZL/V002 (variation)	Duly made 21/05/2012	Application to add a wood recycling facility and increase annual waste throughput.
Variation determined EPR/UP3494ZL	23/07/2012	Varied permit issued.
Application EPR/UP3494ZL/V006 (variation and consolidation)	Duly made 02/09/2014	Application to add a newly prescribed activity as part of the implementation of the Industrial Emissions Directive and update the permit to modern conditions.
Additional information received	09/04/2015 and 14/04/2015	Schedule 5 response including updated BAT statement, environmental risk assessment, site layout plans and operating techniques document.
Additional information received	02/07/2015	Further information including details on pre-acceptance procedures, open windrows process water drainage, quarantine and environmental risk assessment.
Additional information received	23/07/2015	Amended IVC drainage plan, IVC surface plan and waste code removals and justification.
Additional information received	01/09/2015	Confirmation of waste code restrictions and operational details of street sweeping transfer station.
Additional information received	02/09/2015	Confirmation of waste code removals and restrictions and removal.
Variation determined EPR/UP3494ZL	09/10/2015	Varied and consolidated permit issued in modern condition format.
Application EPR/UP3494ZL/V004 (variation)	Duly made 07/12/2015	Application to add EWC waste codes to Table S2.3 of Condition 2.3.4.

Status log of the permit		
Description	**Date**	**Comments**
Variation issued EPR/UP3494ZL	11/01/2016	Varied permit issued.
Notified change of company name	07/04/2016	Request from operator to update their company name from SITA UK Limited to SUEZ Recycling and Recovery UK Ltd.
Variation issued EPR/UP3494ZL/V005	30/06/2016	Varied permit issued to SUEZ Recycling and Recovery Ltd.
Regulation 61 Notice sent to Operator	20/01/2020	Regulation 61 Notice requiring information for statutory review of permit.
Regulation 61 Notice response	20/07/2020	Response received from the operator.
Application EPR/UP3494ZL/V006 (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/UP3494ZL (Billing Ref: FP3402LT)	18/01/2022	Varied and consolidated permit issued.
Application Variation EPR/UP3494ZL/V007	Duly made 02/05/2024	Application to remove IVC activity and add an anaerobic digestion activity, DAAs and Combined Heat and Power (CHP) engine.
Additional information received	05/12/2023	Change to EWC codes, tonnage and • Application Forms A, C2 and C3. • Best Available Techniques and Operating Techniques (BATOT). • Environmental Risk Assessment. • Odour Management Plan. • Pest Management Plan. • Site Condition Report. • Non-Technical Summary.
Additional information received	25/10/2024	Updated site plan received
Variation issued EPR/UP3494ZL/V007	11/02/2025	Varied permit issued.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

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

Permit number

EPR/UP3494ZL

Issued to

SUEZ Recycling and Recovery UK Ltd ("the operator")

whose registered office is

SUEZ House
Grenfell Road
Maidenhead
Berkshire
SL6 1ES

company registration number 02291198

to operate regulated facilities at

Ellington Road Anaerobic Digestion and Composting Facility
Ellington Road
Newmoor
Ashington
Northumberland
NE63 9XS

to the extent set out in the schedules.

The notice shall take effect from 11 February 2025

Name	Date
Peter Maksymiw	**11/02/2025**

Authorised on behalf of the Environment Agency

Schedule 1

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

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/UP3494ZL

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/UP3494ZL/V007 authorising,

SUEZ Recycling and Recovery UK Ltd ("the operator"),

whose registered office is

SUEZ House
Grenfell Road
Maidenhead
Berkshire
SL6 1ES

company registration number 02291198

to operate installations and waste operations at

Ellington Road Anaerobic Digestion and Composting Facility
Ellington Road
Newmoor
Ashington
Northumberland
NE63 9XS

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

Name	Date
Peter Maksymiw	**11/02/2025**

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

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

(b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

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

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

1.2 Energy efficiency

1.2.1 For the following activities referenced in schedule 1, table S1.1 AR1 to AR13, the operator shall:

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

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

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

1.3 Efficient use of raw materials

1.3.1 For the following activities referenced in schedule 1, table S1.1 AR1 to AR13, the operator shall:

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

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

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

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

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

1.4.1 The operator shall take appropriate measures to ensure that:

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

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

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

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

2 Operations

2.1 Permitted activities

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

2.1.2 For the following activities referenced in schedule 1, table S1.1 AR1 to AR13, the activities shall be undertaken in accordance with best available techniques.

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

2.1.4 For the following activities referenced in schedule 1, table S1.1 AR1 to AR13, waste authorised by this permit shall be clearly distinguished from any other waste on the site.

2.2 The site

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

2.3 Operating techniques

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

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

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

2.3.4 Waste shall only be accepted if:

(a) it is of a type and quantity listed in schedule 2 tables S2.2, S2.3, S2.4 and S2.5; and

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

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

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

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

(b) the composition of the waste;

(c) the handling requirements of the waste;

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

(e) the waste code of the waste.

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

2.3.7 For the following activities referenced in schedule 1, table S1.1 AR1 to AR13, 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 (AR9):

(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.

2.5 Pre-operational conditions

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

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 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 and S3.2.

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

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

3.2 Emissions of substances not controlled by emission limits

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

3.2.2 The operator shall:

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

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

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

3.2.4 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.

3.3.2 The operator shall:

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

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

3.4 Noise and vibration

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

3.4.2 The operator shall:

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

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

3.5 Monitoring

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

(a) point source emissions specified in tables S3.1 and S3.2;

(b) process monitoring specified in table S3.3 and S3.4;

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

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

3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 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.

4.1.3 The operator shall maintain a record of the type and quantity of fuel used and the total annual hours of operation of each MCP.

4.2 Reporting

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

4.2.2 For the following activities referenced in schedule 1, table S1.1 AR1 to AR13, 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 materials from feedstock prior to processing and the level of contamination in the final recovered 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 medium combustion plant.

4.3.9 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:

(a) a decision by the Secretary of State not to re-certify the agreement;

(b) a decision by either the operator or the Secretary of State to terminate the agreement; and

(c) any subsequent decision by the Secretary of State to re-certify such an agreement.

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 – Anaerobic digestion	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 three tanks followed by burning of biogas produced from the process or alternatively injected into the gas grid. Waste types suitable for acceptance are limited to those specified in Table S2.2.
AR2 – Open windrow composting facility	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 composting and recovery of by-products. Composting of waste under aerobic conditions in open systems such as outdoor turned windrows or aerated static piles on impermeable surface with a sealed drainage system. The maximum quantity of waste being stored, composted and stored for maturation on site shall not exceed 12,000 tonnes at any one time. Waste types suitable for acceptance are limited to those specified in Table S2.3.
	Directly Associated Activity		
AR3	Storage of waste pending recovery or disposal	R13: Storage of waste pending the R3 operation (excluding temporary storage, pending collection,	From the receipt of permitted waste to pre-treatment and despatch for anaerobic digestion or composting on site or

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**
		on the site where it is produced)	despatch off site for recovery. **AR1** Storage of waste in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with a sealed drainage system. Waste types suitable for acceptance are limited to those specified in Table S2.2. **AR2** Storage of waste on an impermeable surface with a sealed drainage system. Waste types suitable for acceptance are limited to those specified in Table S2.3. No waste shall be stored prior to composting longer than 5 days. The maximum quantity of waste being stored, composted and stored for maturation on site shall not exceed 12,000 tonnes at any one time.
AR4	Physical treatment for the purposes of recycling	R3: Recycling/reclamation of organic substances which are not used as solvents	From the receipt of permitted waste to pre-treatment and despatch for anaerobic digestion or composting on site or despatch off site for recovery. **AR1** Pre-treatment of waste in enclosed building fitted with appropriate odour abatement and on an

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**
			impermeable surface with a sealed drainage system, including shredding, sorting, screening, compaction, baling, mixing and maceration. Post-treatment of digestate in an enclosed fitted with appropriate odour abatement and on an impermeable surface with a sealed drainage system, including separation, 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 1 tank 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. **AR2** From the receipt of waste to despatch for composting or despatch off site for recovery. Pre-treatment of waste prior to composting on an impermeable surface with a sealed drainage system including shredding and screening.

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**
			Post-treatment of processed compost on an impermeable surface with a sealed drainage system including screening to remove contraries prior to maturation. The maximum quantity of waste being stored, composted and stored for maturation on site shall not exceed 12,000 tonnes at any one time. Waste types suitable for acceptance are limited to those specified in Table S2.3.
AR5	Raw material storage	Storage of raw materials including lubrication oil, antifreeze, activated carbon, sulphuric acid and diesel.	From the receipt of raw materials to despatch for use within the facility.
AR6	Storage of finished compost and non-composted fraction	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 permitted waste to pre-treatment and despatch for anaerobic digestion or composting on site or despatch for use off-site. **AR2** Storage of processed uncertified compost on an impermeable surface with a sealed drainage system
AR7	Process water collection and storage	Collection and storage of compost liquor/leachate one storage tank and one lagoon.	From the receipt of compost leachate produced at the facility to despatch for treatment at the facility or despatch off site for recovery or disposal.
AR8	Surface water collection and storage	Collection and storage of uncontaminated roof and site surface water in a surface water balancing pond.	From the collection of uncontaminated roof and site surface water from non-operational areas only to re-use within the facility or discharge off-site.
AR9	Steam and electrical power supply	R1: Use principally as a fuel to generate energy	From the receipt of biogas produced at the on-site

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**
			anaerobic digestion process to combustion with the release of combustion gases. Combustion of biogas in 1 combined heat and power (CHP) engine with a thermal input of 1.2 MWth.
AR10	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 an auxiliary flare required only during periods of breakdown or maintenance of the CHP engine(s), biogas upgrading plant and/or auxiliary boiler(s).
AR11	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 three stand-alone tank(s) or roof space of digester(s). From the receipt of biogas produced a t the on-site anaerobic digestion process to despatch for use within the facility.
AR12	Gas upgrading	Upgrading of biogas to biomethane (including the removal of moisture and other substances such as carbon dioxide, hydrogen sulphide and Volatile organic compounds) for injection into the National Grid.	From the receipt of biogas produced at the on-site anaerobic digestion process to injection into the National Grid. This includes return of off-specification biogas for combustion to the on-site CHP engine(s), auxiliary boiler(s) and/or emergency flare.
AR13	Digestate storage	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection,	From the receipt of processed uncertified digestate produced from the on-site anaerobic digestion

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**
		on the site where it is produced)	process to despatch for use off-site. Storage of processed uncertified liquid digestate in 3 storage tanks. Storage of processed uncertified solid digestate in a covered bay on an impermeable surface with sealed drainage system.

Activity reference	**Description of activities for waste operations**	**Limits of activities**
AR14 – Wood shredding facility	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) R3: Recycling/reclamation of organic substances which are not used as solvents	Treatment operations shall be limited to: Physical treatment of waste wood including sorting, separation, shredding, chipping and screening for the purpose of recovery. No waste wood shall be stored on site prior to shredding for longer than 3 months. Waste types as specified in Table S2.4.
AR15 – Street sweeping waste transfer station	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)	All storage of street sweeping residues shall take place on an impermeable surface with a sealed drainage system. Storage of waste prior to removal off site for recovery. Process water shall be collected and removed from the site. Collected process waters shall not be added to the composting processes. Waste types as specified in Table S2.5.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Additional information	Odour management plan reference 'Odour Management Plan November 2013' (and any subsequent amendments).	19/12/2013
Application	Technical standards detailed in response to section 3, Table 3 – Technical Standards, Part C3 of the application form and	02/09/2014

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
	referenced supporting documents (unless explicitly noted as superseded).	
Response to Schedule 5 Notice dated 10/03/2015	Letter detailing responses to Schedule 5 notice reference 'A088458/AJB/Sch5-01'. Amended documents received superseding previous documents including: • Best Available Techniques statement reference 'Ellington Road Composting Facility – Best Available Techniques Assessment (v2)'. • Operating techniques document reference 'Ellington Road Composting Facility – Operating Techniques (v2)'. Other documents supplied include bio-filter summary, feedstock inventory, waste storage timescales, IVC controls and contingencies, IVC odour handbook and updated site layout plan reference 'Ell-IVC-0415-01'.	09/04/2015 and 14/04/015
Additional information – Request for information 1 (dated 12/06/2015)	Email addressing updated environmental risk assessments, pre-acceptance measures, quarantine in the IVC, wheel wash residues, Open Windrow Composting site infrastructure and confirmation of air abatement system coverage. Amended documents received superseding previous documents including: • Environmental risk assessment document reference 'Ellington Road Composing Facility – H1 Environmental Risk Assessment (v3)'.	02/07/2015
Additional information – Request for information 2 (dated 08/07/2015)	Email confirming IVC site surfacing and drainage with associated plans, information on quarantine areas in the IVC, justification for maintaining waste codes. Waste acceptance descriptions for trommel fines are excluded as an operating technique.	23/07/2015
Additional information – Request for information 3,4 and 5 (dated 13/08/2015 and 26/08/2015)	Email confirming how street sweeping residues are stored at site.	01/09/2015
Application	Amended documents received superseding previous documents including: • Best Available Techniques and Operating Techniques (BATOT) • Odour Management Plan. • Pest Management Plan.	25/05/2024

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC1	The operator shall submit an odour management plan for the Open Windrows Composting activity to the Environment Agency for written approval. The plan shall take into account the appropriate measures for odour control specified in section 2.2.6 of Sector Guidance Note IPPC S5.06 – *Guidance for the Treatment of Hazardous and Non Hazardous Waste*. The plan shall also incorporate all the required detailed information as specified in the Environment Agency's Horizontal Guidance H4 – *Odour Management.* The plan must contain dates for implementation of individual measures.	Completed
Improvement condition for progress report to achieve BAT-AELs		
IC2	The operator shall submit, for approval by the Environment Agency, a report setting out progress to achieving the Best Available Techniques Conclusion Associated Emission Levels (BAT-AELs) where BAT is currently not achieved, but will be achieved before 17 August 2022. The report shall include, but not be limited to, the following: 1) Current performance against the BAT-AELs. 2) Methodology for reaching the BAT-AELs. 3) Associated targets /timelines for reaching compliance by 17 August 2022. 4) Any alterations to the initial plan (in progress reports). The report shall address the BAT Conclusions for Waste Treatment with respect to the following: • **BAT 34 Table 6.7** (compliance with BAT-AELs for channelled NH_3, odour, dust and TVOC emissions to air from the biological treatment of waste) Refer to BAT Conclusions for a full description of the BAT requirement.	Completed
Improvement condition for progress report to achieve Narrative BAT		
IC3	The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving the 'Narrative' BAT where BAT is currently not achieved, but will be achieved before 17 August 2022. The report shall include, but not be limited to, the following: 1) Methodology for achieving BAT 2) Associated targets /timelines for reaching compliance by 17 August 2022 3) Any alterations to the initial plan (in progress reports). The report shall address the BAT Conclusions for Waste Treatment with respect to BAT 1, 2, 3, 4, 5, 8, 10, 12, 13, 14, 18, 19, 21, 22, 23, 24, 33, 34, 35, 36 and 37.	Completed
Improvement condition for site risk assessment to prevent soil & groundwater pollution		

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC4	The operator shall submit to the Environment Agency for approval a risk assessment considering the possibility of soil and groundwater contamination at the installation where the activity involves the use, production or release of a relevant hazardous substance (as defined in Article 3(18) of the Industrial Emissions Directive). The risk assessment shall clearly establish with appropriate evidence whether or not there is a risk of contamination of soil and groundwater and should follow the Defra Guidance – Industrial Emissions Directive EPR Guidance on Part A Installations (Section 5.10-5.15, pages 28-29 - Baseline Reports and Permit Surrender).	Completed
IC5	Where the risk assessment carried out under IC4 above establishes a risk to soil and groundwater, the operator shall: a) prepare and submit a baseline report compliant with Article 22 of the Industrial Emissions Directive (IED) containing information necessary to determine the current state of soil and groundwater contamination; or b) provide a summary report referring to information previously submitted where the operator is satisfied that such information represents the current state of soil and groundwater contamination, so as to enable a quantified comparison to be made with the state of soil and groundwater contamination upon definitive cessation of activity.	Completed
Improvement condition for primary containment		
IC6	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

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
Improvement condition for secondary containment design		
IC7	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 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.	Completed
Improvement condition for storage lagoon design		
IC8	The operator shall submit a written 'storage lagoon plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of an inspection and program of works undertaken by a competent structural engineer, in accordance with the risk assessment methodology detailed within CIRIA C736 (2014) guidance, of the condition and extent of the site lagoon(s) where digestate or compost leachate are being stored, treated, and/or handled. The inspection shall consider, but not be limited to, the transfer pipework/pumps, and liners underlying the storage lagoons. The plan shall include: • an assessment of the physical condition of the storage lagoons, using a Written Scheme of Examination and the suitability for providing containment when subjected to the dynamic and static loads caused by the digestate or compost leachate; • a program of works with timescales for the implementation of individual improvement measures necessary for the storage	Completed

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
	lagoon 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 lagoon cover and operational storage capacity		
IC9	The operator shall provide a written "compost liquor storage plan" and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review of the current storage of digestate and/or compost liquor produced from site operations. The review shall examine site contingency arrangements in the event of closed landspreading periods, extreme weather conditions, site closure, disease outbreak etc. The storage plan shall include: • Existing cover arrangements on storage lagoons used to store digestate and/or compost liquor to minimise odour, ammonia and methane emissions; • Additional storage capacity on-site (at least 2 months storage) and storage capacity off-site; • Identification of alternative outlets for compost liquor – identify companies /permitted waste facilities that would be able to manage the liquor output, taking into account their permits and capacity constraints. The plan shall be implemented in accordance with the Environment Agency's written approval.	30/09/2025 or other date as agreed in writing with the Environment Agency
Improvement condition for review of effectiveness of abatement plant		
IC10	The operator shall carry out a review of the abatement plant on site, in order to determine whether the measures have been effective and adequate to prevent and where not possible minimise emissions released to air including but not limited to odour and ammonia. The operator shall submit a written report to the Environment Agency following this review for assessment and approval. The report shall include but not limited to the following aspects: • Full investigation and characterisation of the waste gas streams. • Abatement stack monitoring results (not limited to odour and ammonia) • Abatement process monitoring results (not limited to odour and ammonia) • Details of air quality quantitative impact assessment including modelling and a proposal for site-specific "action levels" (not limited to odour concentration, hydrogen sulphide and ammonia).	Completed

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
	• 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		
IC11	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

Table S1.4 Pre-operational measures for future development		
Reference	**Operation**	**Pre-operational measures**
PO1	Operation of activity AR1, a stated in Table S1.1 of this permit.	**Pre-operational condition for suitability of site secondary containment** At least 8 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall ensure that a review of the design,

Table S1.4 Pre-operational measures for future development		
Reference	**Operation**	**Pre-operational measures**
		method of construction and integrity of the proposed site secondary containment is carried out by a competent person (qualified civil or structural engineer). The review shall be undertaken in accordance with the methodology detailed in CIRIA C736 - Containment Systems for the Prevention of Pollution - secondary, tertiary and other measures for industrial and commercial premises or other relevant industry standard and shall compare the constructed secondary containment against the standards stated above. The review shall include: • physical condition of the constructed secondary containment • the suitability for providing containment when subjected to the dynamic and static loads; • any work required to ensure compliance with the standards detailed in CIRIA C736 or other relevant industry standard; and • a maintenance and inspection regime A written report of the review shall be submitted to the Environment Agency detailing the review's findings and recommendations. Remedial action shall be taken to ensure that the secondary containment meets the CIRIA C736 standards and the operator must implement the maintenance and inspection regime. No site operations shall commence or waste accepted at the facility unless the Environment Agency has given prior written permission under this condition.
PO2	Operation of activity AR1, a stated in Table S1.1 of this permit.	**Pre-operational condition for suitability of primary containment.** At least 8 weeks (or any other date as agreed with the Environment Agency) prior to commissioning of the installation, the operator shall submit a written 'primary containment report' and shall obtain the Environment Agency's written approval to it. The report 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 report 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 maintenance and inspection regime The program of works shall be implemented in accordance with the Environment Agency's written approval.

Table S1.4 Pre-operational measures for future development		
Reference	**Operation**	**Pre-operational measures**
PO3	Operation of activity AR1, a stated in Table S1.1 of this permit.	**Pre-operational condition for operational contingency storage capacity.** At least 8 weeks (or any other date as agreed with the Environment Agency) prior to commissioning of the installation, the operator shall provide a written "digestate storage plan" and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review of the storage of digestate produced from site operations. The review shall examine site contingency arrangements in the event of closed landspreading periods, extreme weather conditions, site closure, disease outbreak etc. 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 – identify companies /permitted waste facilities that would be able to manage the digestate, taking into account their permits and capacity constraints. The plan shall be implemented in accordance with the Environment Agency's written approval.
PO4	Operation of activity AR1, a stated in Table S1.1 of this permit.	**Pre-operational condition for undertaking background bioaerosols concentration.** At least 8 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall carry out background sampling of bioaerosols upwind of the plant and submit a written report of the monitoring to the Environment Agency and for approval. The sampling shall be undertaken in accordance with the Technical Guidance Note M9 – Environmental monitoring of bioaerosols at regulated facilities (January 2017). The operator shall obtain the Environment Agency's written approval to the report.

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	**Specification**
Fuel oil	Sulphur content not exceeding 0.1% by mass.

Table S2.2 Permitted waste types and quantities for anaerobic digestion	
Maximum quantity	**Annual throughput shall not exceed 100,000 tonnes**
Exclusions	Wastes having any of the following characteristics shall not be accepted: • biodegradable wastes that is significantly contaminated with non-compostable or digestible contaminants, in particular plastic and litter shall be no more than 5% w/w and shall be as low as reasonably practicable by 31 December 2025. • wastes containing wood-preserving agents or other biocides and post-consumer wood • wastes containing persistent organic pollutants • wastes containing Japanese Knotweed or other invasive plant species listed in the Invasive Species (Amendment etc.) (EU Exit) Regulations 2019 • manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013. • pest infested waste
Waste code	**Description**
02	**Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing**
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 01	sludges from washing and cleaning – vegetables, fruit and other crops
02 01 02	animal tissue waste
02 01 03	plant tissue waste
02 01 06	animal faeces, urine and manure (including spoiled fully biodegradable animal bedding)
02 01 07	wastes from forestry
02 01 99	wastes not otherwise specified – spent mushroom compost from commercial mushroom growing only

02 02	**wastes from the preparation and processing of meat, fish and other foods of animal origin**
02 02 01	sludges from washing and cleaning, peeling, centrifuging and separation including wash waters and sludges from secondary food processing or the cook chill sector
02 02 02	animal tissue waste
02 02 03	materials unsuitable for consumption or processing including animal gut contents
02 02 04	sludges from on-site effluent treatment including sludges from gelatine production
02 03	**wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation**
02 03 01	sludges from washing, cleaning peeling, centrifuging and separation (including sludge from production of edible fats and oils, seasoning residues, molasses residues, residues from production of potato, corn or rice starch only)
02 03 04	materials unsuitable for consumption or processing (including waste from production of edible fats and oils, seasoning residues, molasses residues, residues from production of potato, corn or rice starch only)
02 03 05	sludges from on-site effluent treatment (including sludge from production of edible fats and oils, seasoning residues, molasses residues, residues from production of potato, corn or rice starch only)
02 04	**wastes from sugar processing**
02 04 01	soils from washing and cleaning beet
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
15 02	**absorbents, filter materials, wiping cloths and protective clothing**
15 02 03	absorbents, filter materials and cloths from the production of alcoholic and non-alcoholic beverages other than those mentioned in 15 02 02 made from compostable material only
16	**Wastes not otherwise specified in the list**
16 10	**aqueous liquid wastes destined for off-site treatment**

16 10 02	untreated wash waters from cleaning fruit and vegetables on farm only
16 10 02	milk and dairy waste milk from agricultural premises only
16 10 02	liquor/leachate from a composting process that accepts waste input types listed in this table only and in compliance with Animal By-Products Regulations
19	**Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use**
19 02	**wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)**
19 02 03	premixed wastes composed of waste types listed within this table, Table S2.2 only
19 02 06	sludge types from waste listed within this table, Table S2.2, that have been heat treated only
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05 (sewage sludge which has been previously pasteurised and stabilised only)
19 02 10	glycerol not designated as hazardous i.e. excludes EWC code 19 02 08
19 06	**wastes from anaerobic treatment of waste**
19 06 03	liquor from anaerobic treatment of municipal waste (from a process that accepts wastes which are listed in this table only) and made up of previously pasteurised and stabilised batches only
19 06 04	digestate from anaerobic treatment of source segregated biodegradable waste (from a process that accepts wastes which are listed in this table only) and made up of previously pasteurised and stabilised batches only
19 06 05	liquor from anaerobic treatment of animal and vegetable waste (from a process that accepts wastes which are listed in this table only) and made up of previously pasteurised and stabilised batches only
19 06 06	digestate from anaerobic treatment of animal and vegetable waste (previously digested sewage sludge only)
19 08	**wastes from waste water treatment plants not otherwise specified**
19 08 09	grease and oil mixture from oil/water separation containing only edible oil and fats
19 08 12	sludges from biological treatment of industrial waste water (from a process that treats wastes which are listed in this table only).
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 12	waste types listed in this table, Table S2.2, that have been subjected to mechanical treatment only (from a process that treats wastes which are listed in this table only).

20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 01	paper and cardboard (excluding veneers, plastic coatings or laminates) meeting EN 13432 or equivalent certified compostable or digestible packaging only
20 01 08	biodegradable kitchen and canteen waste containing compostable plastics meeting EN 13432 or equivalent certified compostable or digestible packaging (Category 3 ABPR waste only)
20 01 25	edible oil and fat
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste
20 03	**other municipal wastes**
20 03 01	mixed municipal waste – only separately collected biodegradable wastes of types listed within this table, Table S2.2
20 03 02	waste from markets – allowed only if source segregated biodegradable fractions e.g. plant material, fruit and vegetables

Table S2.3 Permitted waste types and quantities for composting in open systems	
Maximum quantity	**Annual throughput shall not exceed 39,000 tonnes.**
Exclusions	Wastes having any of the following characteristics shall not be accepted: • Biodegradable wastes that are significantly contaminated with non-compostable or digestible contaminants, in particular plastic and litter shall be no more than 1% w/w and shall be as low as reasonably practicable by 31 December 2025. • Waste consisting solely or mainly of dusts (except sawdust), powders or loose fibres. • Hazardous wastes. • Wastes that are in liquid form. • Wastes containing wood-preserving agents or other biocides and treated wood and post-consumer wood. • Wastes containing persistent organic pollutants. • Wastes containing Japanese Knotweed or other invasive plant species listed in the Invasive Species (Amendment etc.) (EU Exit) Regulations 2019. • Manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013. • Pest infested waste.
Waste code	**Description**
02	**Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing**

Table S2.3 Permitted waste types and quantities for composting in open systems	
Maximum quantity	**Annual throughput shall not exceed 39,000 tonnes.**
Exclusions	Wastes having any of the following characteristics shall not be accepted: • Biodegradable wastes that are significantly contaminated with non-compostable or digestible contaminants, in particular plastic and litter shall be no more than 1% w/w and shall be as low as reasonably practicable by 31 December 2025. • Waste consisting solely or mainly of dusts (except sawdust), powders or loose fibres. • Hazardous wastes. • Wastes that are in liquid form. • Wastes containing wood-preserving agents or other biocides and treated wood and post-consumer wood. • Wastes containing persistent organic pollutants. • Wastes containing Japanese Knotweed or other invasive plant species listed in the Invasive Species (Amendment etc.) (EU Exit) Regulations 2019. • Manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013. • Pest infested waste.
Waste code	**Description**
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 03	plant-tissue waste
02 01 07	wastes from forestry (biodegradable only)
03	**Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard**
03 01	**wastes from wood processing and the production of panels and furniture**
03 01 01	waste bark and cork – virgin timber only
03 01 05	sawdust, shavings, cuttings, wood and particle board other than those mentioned in 03 01 04 – virgin timber only
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood – virgin timber only
03 03 10	fibre rejects only – virgin timber and biodegradable 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 03	wooden packaging – untreated timber only
17	**Construction and demolition wastes (including excavated soil from contaminated sites)**
17 02	**wood, glass and plastic**
17 02 01	wood – excluding treated wood containing veneers, other coatings or preserving agents. No chemical additives or preservatives, and no persistent organics present. Untreated wood only.
17 05	**soil (including excavated soil from contaminated sites), stones and dredging spoil**

Table S2.3 Permitted waste types and quantities for composting in open systems	
Maximum quantity	**Annual throughput shall not exceed 39,000 tonnes.**
Exclusions	Wastes having any of the following characteristics shall not be accepted: • Biodegradable wastes that are significantly contaminated with non-compostable or digestible contaminants, in particular plastic and litter shall be no more than 1% w/w and shall be as low as reasonably practicable by 31 December 2025. • Waste consisting solely or mainly of dusts (except sawdust), powders or loose fibres. • Hazardous wastes. • Wastes that are in liquid form. • Wastes containing wood-preserving agents or other biocides and treated wood and post-consumer wood. • Wastes containing persistent organic pollutants. • Wastes containing Japanese Knotweed or other invasive plant species listed in the Invasive Species (Amendment etc.) (EU Exit) Regulations 2019. • Manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013. • Pest infested waste.
Waste code	**Description**
17 05 06	dredging spoil other than those mentioned in 17 05 05 (from inland waters only)
19	**Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use**
19 02	**wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)**
19 02 03	premixed wastes composed from waste types listed in this table only
19 05	**wastes from aerobic treatment of solid wastes**
19 05 03	off-specification compost from a composting process that accepts waste input types listed in this table, made up of previously sanitised and stabilised batches 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 packaging only
20 01 38	wood other than that mentioned in 20 01 37 – excluding wood with non-biodegradable coating or preserving substance present. No chemical additives or preservatives, and no persistent organics present. Untreated wood only.
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste (plant matter only)

Table S2.4 Permitted waste types and quantities for wood shredding	
Maximum quantity	**Annual throughput shall not exceed 50,000 tonnes.**
Exclusions	Wastes having any of the following characteristics shall not be accepted: • Consisting solely or mainly of dusts (except sawdust), powders, or loose fibres. • Wastes that are in a form which is liquid. • Hazardous wastes.
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 03	plant-tissue waste
02 01 07	wastes from forestry
03	**Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard**
03 01	**wastes from wood processing and the production of panels and furniture**
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood and particle board other than those mentioned in 03 01 04 only
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood
03 03 10	fibre rejects 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 03	wooden packaging
17	**Construction and demolition wastes (including excavated soil from contaminated sites)**
17 02	**wood, glass and plastic**
17 02 01	wood
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 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 07	wood other than that mentioned in 19 12 06
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 38	wood other than that mentioned in 20 01 37
20 03	**other municipal wastes**
20 03 07	Bulky waste (wood)

Table S2.5 Permitted waste types and quantities for street cleaning residue transfer station	
Maximum quantity	**Annual throughput shall not exceed 1,000 tonnes.**
Exclusions	Wastes having any of the following characteristics shall not be accepted: • Consisting solely or mainly of dusts (except sawdust), powders, or loose fibres. • Wastes that are in a form which is liquid. • Hazardous wastes.
Waste code	**Description**
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 03	**other municipal wastes**
20 03 03	street cleaning residues

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 [*Biofilter 1* on site plan in Schedule 7]	Open Biofilter 1 Channelled emissions from odour abatement.	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	1,000 ouE/m^3	--	Once every 6 months	BS EN 13725
A2 [*Biofilter 2* on site plan in Schedule 7]	Open Biofilter 2 Channelled emissions from odour abatement.	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
A3 [*CHP engine stack* on site plan in Schedule 7]	CHP engine stack [burning biogas] [note 1]	Oxides of Nitrogen (NO and NO2 expressed as NO2)	500 mg/Nm3	Periodic over minimum 1-hour period	Annual	BS EN 14792
		Sulphur dioxide	107 mg/Nm3	Periodic over minimum 1-hour period	Annual	BS EN 14791

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
		Carbon monoxide	1,400 mg/m3	Periodic over minimum 1-hour period	Annual	BS EN 15058
		Total VOCs	1,000 mg/m3	Hourly average	Annual	BS EN 12619:2013
A4 Emergency Flare Stack	Emergency Flare Stack	Oxides of Nitrogen (NO and NO2 expressed as NO2)	150 mg/m3	Hourly average	Annual	BS EN 14792
		Carbon monoxide	50 mg/m3	Hourly average		BS EN 15058
		Total VOCs	10 mg/m3	Hourly average		BS EN 12619:2013 Or BS EN 1356:2002 depending on concentration
Odour control emission stack	Channelled emissions such as odour abatement stack or vent(s)	No parameter set	No limit set	--	--	--
Vents from oil storage tank	Oil/Fuel storage tank	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 emergency flares and medium combustion plants other than engines and gas turbines burning biogas such as boilers).						

Table S3.2 Point source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
'Surface water Balancing Pond' on site layout plan 'Drainage layout – Ell-IVC-DRN-0715-01' to surface water drainage system	Uncontaminated site surface water from roofs and non operational areas	Oil or grease	No visible oil or grease	--	Weekly	Visual assessment
'Surface water emission to Potland Burn' on site layout plan 'IVC & Compost Layout – Ell-IVC-0415-01' to Potland Burn	Uncontaminated surface waters from the balancing pond	Oil or grease	No visible oil or grease	--	Weekly	Visual assessment
Note – Clean surface water from roofs, or from areas of the site that are not being used in connection with storing and treating waste can be discharged directly to surface waters, or to groundwater by seepage through the soil via a soakaway.						

Table S3.3 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	Process monitoring to be recorded using a

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
			measures Regulations	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			
Digester(s) and storage tank(s)	Integrity checks	Weekly	Visual assessment	In accordance with design specification and tank integrity checks.
Digester(s)	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; Digester(s) and storage tank(s)	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	'Sniffing' and/or Optical Gas Imaging techniques in accordance with BS EN 15446 &	Monitoring points as specified in a DSEAR risk assessment and LDAR programme.

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
			BS EN 17628	Limit as agreed with the Environment Agency as a percentage of the overall gas production.
CHP engine stack(s)	VOCs including methane	Annually	BS EN 12619	Total annual VOCs emissions from the CHP engine(s) 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	Date, time and duration of use of auxiliary flare shall be recorded.

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
	Quantity of gas sent to emergency flare		SCADA system or similar system	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.

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
				Operator must ensure that PRV function remains within designed operation gas pressure in accordance with the manufacturer's design by suitably trained/qualified personnel. Inspection, calibration and validation report. In accordance with industry Approved Code of Practice
Storage lagoons and storage tanks	Volume	Daily	Visual or flow metre measurement	750 mm freeboard must be maintained for storage lagoons. Records of volume must be maintained.

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
Activity AR2 – Open windrows composting Representative internal core for each composting batch during sanitisation stage	Temperature	Daily during sanitisation stage	Temperature probe Temperature probe shall record core waste temperature and probe placement must be sufficient to record temperature uniformly.	Monitoring equipment shall be available on site and used as required to maintain aerobic conditions and ensure compliance with this permit. Equipment shall be calibrated in accordance with manufacturers recommendations, on a 4-monthly basis, or as agreed in writing by the
	Moisture	Daily during sanitisation stage	Industry grab test as a minimum, or oven drying in	

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
			accordance with BS EN 13040	Environment Agency.
	C:N Total Organic Carbon and Total Kjeldahl Nitrogen	Weekly or as agreed in an approved odour management plan	Total Organic Carbon using recognised industry method Total Kjeldahl Nitrogen in accordance with BS EN 13654-1	Process shall be controlled in accordance with permit condition 3.3 and the Odour Management Plan. Sampling of waste shall be in accordance with EN14899. Anaerobic conditions shall be prevented.
Activity AR2 – Open windrows composting Representative internal core for each composting batch during stabilisation stage	Temperature	Weekly during stabilisation stage	Temperature probe Temperature probe shall record core waste temperature and probe placement must be sufficient to record temperature uniformly.	Monitoring equipment shall be available on site and used as required to maintain aerobic conditions and ensure compliance with this permit. Equipment shall be calibrated in accordance with manufacturers recommendations, on a 4-monthly basis, or as agreed in writing by the Environment Agency. Process shall be controlled in accordance with permit condition 3.3 and the Odour Management Plan. Sampling of waste shall be in accordance with EN14899.
	Moisture	Weekly during stabilisation stage	Industry grab test as a minimum, or oven drying in accordance with BS EN 13040	
	C:N Total Organic Carbon and Total Kjeldahl Nitrogen	Weekly or as agreed in an approved odour management plan	Total Organic Carbon using recognised industry method Total Kjeldahl Nitrogen in accordance with BS EN 13654-1	

Table S3.3 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
				Anaerobic conditions shall be prevented.
Internal core for oversize storage piles	Temperature	Once per week	Temperature probe As specified in the Environmental Management System	Uncontrolled self-heating and decomposition must be prevented in accordance permit condition 3.8, the Fire Prevention Plan and/or Accident Management Plan.
Leachate and dirty water storage capacity	Level	At least daily	Visual or capacity measurement	750 mm freeboard must be maintained for storage lagoons.
Waste reception building; Storage tank(s); Maturation area	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary
Storage tank(s)	Integrity checks	Weekly	Visual assessment	--

Table S3.4 Process monitoring requirements – odour abatement				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
Odour abatement plant				
Open biofilters				
Biofilter 1 and Biofilter 2	Surface condition (signs of vegetation and channelling)	Daily	Visual assessment	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
	Gas temperature – inlet	Daily	Temperature probe / Traceable to national standards	
	Biofilter media moisture	Daily	Moisture meter, Grab test, oven drying or recognised industry method	

Table S3.4 Process monitoring requirements – odour abatement				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
	Thatching /compaction	Weekly	Back pressure	management plan and manufacturer's recommendations. Equipment shall be calibrated in accordance with manufacturers recommendations, on a 4-monthly basis, or as agreed in writing by the Environment Agency.
	Gas flow rate – inlet	Continuous	Gas flow meter / EN 16911-1 and MID for EN 16911-1	
	pH (biofilter drainage effluent)	Weekly	pH metre or litmus paper	
	Efficiency assessment	Annual	Media health, air-flow distribution and emission removal efficiency (BS EN 13725 for odour removal)	
	Hydrogen sulphide – inlet and outlet gas stream	Every 6 months or as agreed in writing by the Environment Agency.	As agreed in the odour management plan and approved by the Environment Agency	Action levels to be agreed on completion of IC10 as approved in writing by the Environment Agency. Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
	Ammonia – inlet	Every 6 months or as agreed in writing by the Environment Agency.	As agreed in the odour management plan and approved by the Environment Agency	Action levels to be agreed on completion of IC10 as approved in writing by the Environment Agency. Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.

Table S3.4 Process monitoring requirements – odour abatement				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
	Odour concentration – inlet and outlet gas stream	Every 6 months or as agreed in writing by the Environment Agency.	BS EN 13725	Action levels to be agreed on completion of IC10 as approved in writing by the Environment Agency. Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
Scrubbers (water/chemical/dry)				
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 in accordance with manufacturers recommendations, 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	

Table S3.4 Process monitoring requirements – odour abatement				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
	Hydrogen sulphide – inlet and outlet gas stream	Every 6 months or as agreed in writing by the Environment Agency.	CEN TS 13649 for sampling NIOSH 6013 for analysis	Action levels to be agreed on completion of IC10 as approved in writing by the Environment Agency. Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
	Ammonia – inlet	Every 6 months or as agreed in writing by the Environment Agency.	EN ISO 21877	Action levels to be agreed on completion of IC10 as approved in writing by the Environment Agency. Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air from CHP engines Parameters as required by condition 3.5.1	A3	Every 12 months	1 January, 1 April, 1 July, 1 October
Emissions to air from odour abatement plant Parameters as required by condition 3.5.1.	A1 and A2	Every 6 months	1 January, 1 July

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Process monitoring Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.3 and S3.4	Every 12 months	1 January
Biofilter efficiency Parameters as required by condition 4.2.6	Biofilters	Every 12 months	1 January
Non-composable contamination removal efficiency Parameters as required by conditions 2.3.4 and 2.3.7	--	Every 12 months Yearly report of detailing contamination removal efficiency and progress with plastic reduction contamination	1 January
Process monitoring – digester tank integrity Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 5 years from the date of commissioning or as per the manufacturer's recommendation, whichever is sooner	1 January
Process monitoring – under and over pressure relief systems Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 12 months Yearly summary report of over-pressure and under-pressure events detailing mass balance release	1 January
Process monitoring – pressure relief systems (inspection, calibration and maintenance) Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 3 years	1 January
Process monitoring – leak detection and repair surveys Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 12 months LDAR report to be submitted annually	1 January
Process monitoring – use of emergency flare Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Every 12 months	1 January
Non-compostable contamination removal efficiency Parameters as required by conditions 2.3.4, 2.3.7 and 4.2.7	--	Every 12 months Yearly report of detailing contamination removal efficiency and progress with plastic reduction contamination	

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Total annual VOCs emissions from gas engines (calculated)	As specified in schedule 3 table S3.4	Every 12 months	1 January

Table S4.2 Annual production/treatment	
Parameter	**Units**
Processed compost	tonnes
Recovered outputs	tonnes
Electricity generated	MWh
Biomethane generated	tonnes or m^3
CO_2 generated	tonnes or m^3
Liquid digestate	m^3
Solid digestate	tonnes
Recovered outputs	tonnes or m^3

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	tonnes or m^3
Energy usage	Annually	MWh
Total raw material used	Annually	tonnes
Electricity exported	Annually	MWh
Biomethane exported	Annually	tonnes or m^3
CHP engine usage	Annually	hours
CHP engine efficiency	Annually	%

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	01/04/2025
Process monitoring	Form process 1 or other form as agreed in writing by the Environment Agency	01/04/2025
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	01/04/2025
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	01/04/2025
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	01/04/2025

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Waste Returns	E-waste Returns Form or other form as agreed in writing by the Environment Agency	01/04/2025

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.

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

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

“animal waste” means any waste consisting of animal matter that has not been processed into food for human consumption. This does include blood, feathers, uncooked butchers waste and any other animal waste that is not catering waste or former foodstuffs. This does not include faecal matter from animals (e.g. chicken litter or farmyard manure).

“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 the 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 high general level of protection of the environment as a whole.

“bioaerosols action levels” means the maximum acceptable bioaerosol 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 maximum 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.

“closed system” means a closed composting reactor or closed area (such as a building) in which waste is fully contained and efficient air management abatement systems are demonstrated. This may cover a wide range of technology and where necessary is in compliance with the Animal By-Products Regulations.

“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 biological decomposition of organic materials, under conditions that are predominantly aerobic and that allow the development of thermophilic temperatures as a result of biologically produced heat 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 a plug-flow basis, batches will be taken to mean a series of “portions of production”.

“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.

“ground water” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“hazardous waste” has the meaning given in the Hazardous Waste (England and Wales) Regulations as amended.

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

“incidental contamination” means low levels of incidental waste, for example plastic that may be contained within the feedstock waste.

“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.

*“*maturation” means a stage when by agitating and turning the compost, it no longer results in reheating and the monitored temperature falls to ambient without the compost being too dry or anaerobic. Phtotoxin that are formed during the active composting phase are metabolised by microorganisms, which will result in the final material not being too harmful to plants. This usually coincides with a drop in pH toward neutral, and the

conversion of ammonia into nitrates and recolonization of beneficial microorganisms. The maturation phase may need active management by turning to prevent the material becoming anaerobic.

“nearest sensitive receptor” means the nearest place to the permitted activities where people are likely to be for prolonged periods. This term would therefore apply to dwellings (including any associated gardens) and to many types of workplaces. We would not normally regard a place where people are likely to be present for less than 6 hours at one time as being a sensitive receptor. The term does not apply to those controlling the permitted facility, their staff when they are at work or to visitors to the facility, as their health is covered by Health and Safety at Work legislation, but would apply to dwellings occupied by the family of those controlling the composting facility.

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

“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 human sense.
(c) result in damage to material property, or
(d) impair or interfere with amenities and other legitimate uses of the environment.

“post-consumer wood” means manufactured treated wooden materials and products that have been discarded.

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

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

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

“sanitisation” means the actively managed and intensive stage of composting, lasting for at least five days, characterised by high oxygen demand and temperatures of over 55 ºC, 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:

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

“secondary containment” – means a system that is capable of containing loss from all above ground and underground storage tanks and that complies with CIRIA standard 736 or equivalent standard of design and construction.

“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. Soluble carbon is usually not fully used and material is still considered to be in treatment. This stage is a managed process to prevent odours, dust and bioaerosols. There is also a residual risk of reheating and leachate breakout.

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

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes (England)Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

“Waste Framework Directive” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

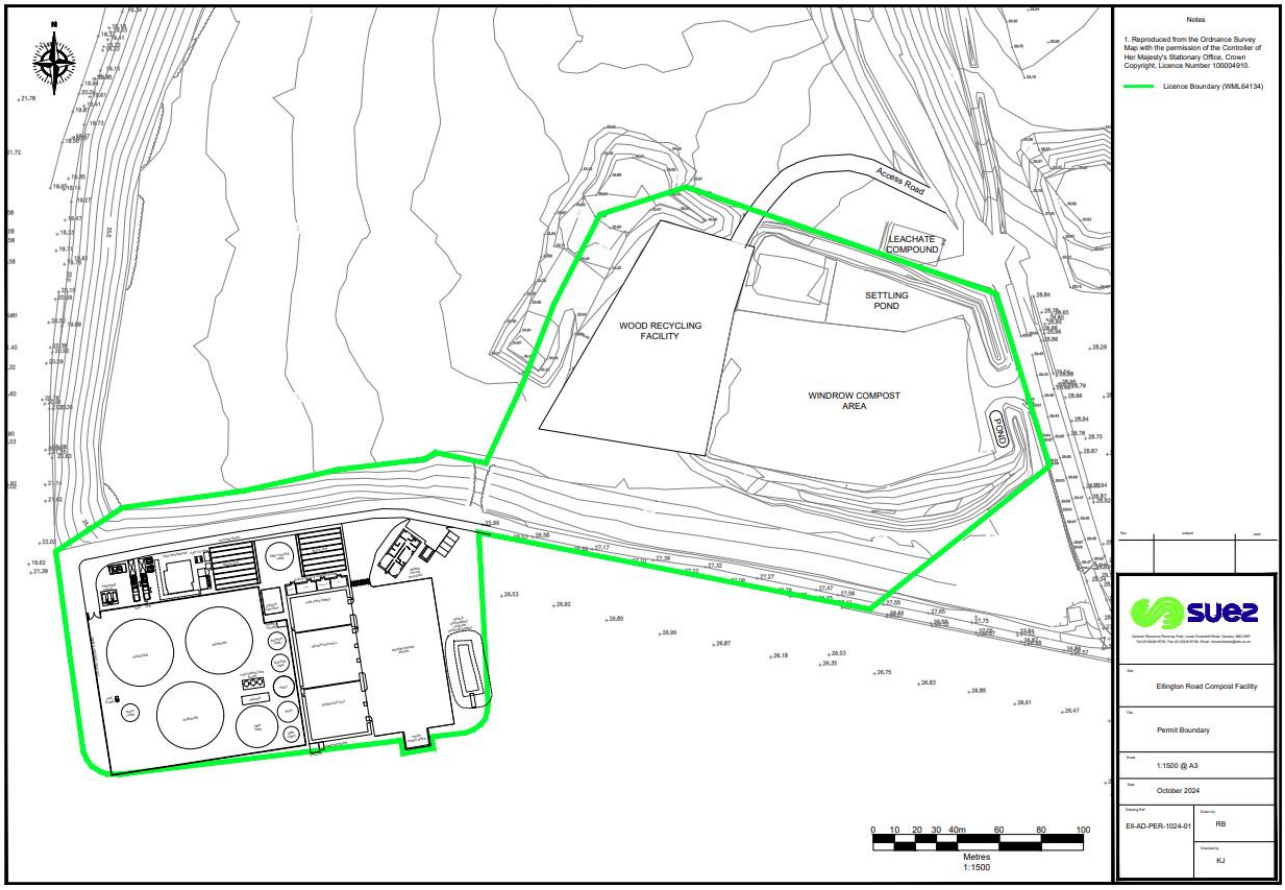
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

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

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



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