

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Orsted REnescience Northwich O & M Limited
REnescience Northwich
Lostock Works
Griffiths Road
Lostock Gralam
Cheshire
CW9 7NU

Variation application number
EPR/VP3338RD/V006

Permit number
EPR/VP3338RD

REnescence Northwich

Permit number EPR/VP3338RD

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

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

- the bioaerosols monitoring and compliance with M9 bioaerosols monitoring requirements.
- the design and construction of secondary containment and storage lagoons;
- the available storage facilities and measures to reduce ammonia emissions from storage; and
- information on existing medium combustion plant and/or specified generators on site.
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This variation has been issued to update some of the conditions following a statutory review of the permits in the industry sector for biowaste treatment. The opportunity has also been taken to consolidate the original permit and subsequent variations.

Brief description of the process

The site is located approximately 0.6 km from the residential outskirts of Northwich and Rudheath to the west and south (or around 2 km from Northwich town centre), and 1.2 km from the village of Lostock Gralam to the east.

The following activities are undertaken at the installation:

- 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.
- S5.4 A(1)(a)(ii) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical treatment
- S5.4 A(1)(b)(ii) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving pre-treatment of waste for incineration or co-incineration.

The facility accepts and treats up to 144,000 tonnes per annum of municipal solid waste, fines and commercial and industrial wastes (including the waste transfer station).

The waste is mixed with hot water and then passed through enzyme reactors. The output from the enzyme reactors comprises bio-liquid and solids, that are removed for segregated recovery in a chain of processes including production of Refuse Derived Fuel (RDF) and Solid Recovered Fuel (SRF). The bio liquid is passed through an anaerobic digester to produce biogas. The biogas is used to power four combined heat and power engines (CHP) on site, to produce electricity for export to local distribution or to the national grid with waste heat being utilised within the waste treatment process. Approximately 6.3 MWe gross of renewable electricity

is generated in the CHP engines, of which at least 5 MWe is exported to the grid or distributed locally. The facility operates for 8,000 hours a year.

Waste renewable heat from the gas engines is also utilised on site to heat and clean the water used in the process. The facility also accepts source segregated materials into the transfer station, which are not subject to treatment within the facility but are stored and bulked for onward transfer. This part of the facility handles up to 30,000 tonnes per year of waste.

The main releases to air are from the CHP engines, emergency flare and carbon filter exhausts. Biogas is burned in the emergency flares in the event of breakdown and/or maintenance of the CHP engines. Uncontaminated site surface water from non-operational parts of the site and from the secondary bund around the digesters is discharged to Wade Brook.

The facility has an acetic acid storage tank on site required to store recovered 80% acetic acid used to adjust the pH of process water prior to use at the facility. The tank is located to the northwest of the site. The tank is located on an impermeable concrete surface on a bunded area and has a scrubber unit attached to minimise fugitive emissions during filling. The tank has a maximum capacity of 42,550 litres with a working capacity of 42,000 litres.

The closest residences are on the A559 Manchester Road, approximately 180m to the north of the site boundary, separated from it by rail sidings, a tree belt and area of open space, warehouses and commercial developments, and the A559. There are further residences and commercial land uses along Manchester Road and around the A559 and A530 junction to the east, between the site and Lostock Gramam.

The Trent and Mersey Canal runs north-south to the east of the site. Its towpath (around 420 metres from the site at the closest point) is a public right of way, separated from the chemical works by security fencing. A further public right of way branches west from the canal towpath to connect with Works Lane, around 250 m north-east of the site boundary at the closest point.

The ecological designated sites within 10 km of the proposed plant are listed below.

- West Midland Mosses Special Area of Conservation – 9.2 km from site;
- Midland Meres and Mosses Phase1 and Phase 2 Ramsar sites – 9.2 km from site;
- 16 SSSIs – the two closest being Witton Lime Beds (2.4 km from site) and Plumley Lime Beds (2.6 km from site).
- Ashton's and Neumann's Flashes (a local wildlife site) are located approximately 900 m from the site.

The schedules specify the changes made to the permit.

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

Status log of the permit		
Description	Date	Comments
Application received	Duly made 17/02/2016	Application for a mechanical and biological treatment (MBT) facility with combustion of biogas.
Application	01/12/2015	Sections 1 – 6 of the application documents in response to section 3 – technical standards, Part B of the application form.
Additional Information	18/02/2016	Engine specifications.
Additional information	23/02/2016 16/03/2016 18/03/2016	Additional information detailing air quality and noise issues.
Additional information	09/03/2016 and 10/03/2016	Additional information concerning anaerobic digestion tank bund design.
Additional information	07/04/2016	Addendum to the Application.

Status log of the permit		
Description	Date	Comments
Response to Schedule 5 Notice dated 15/03/2016	08/04/2016 and 20/04/2016	Response to question 1 submitting the Fire Prevention Plan and letter providing additional clarification.
Response to Schedule 5 Notice dated 15/04/2016	06/05/2016, 10/05/2016 and 01/07/2016	Response to question 1–3 and 7–48 detailing Noise control, emission and monitoring, process and output monitoring, site design and site operation and process. Supplementary Information regarding odour management and abatement.
Additional Information	15/07/2016	Additional information relating to Odour Management and Waste bunker design and management.
Additional Information	16/08/2016	Additional information relating to waste bunker construction and management.
Response to Schedule 5 Notice dated 19/08/2016	07/09/2016	Response to question 1 and 30 detailing clarification of operations and process monitoring
Additional information received	26/09/2016	Confirmation of site boundary and emission points.
Additional information received	28/09/2016	Confirmation of specification of activated carbon.
Permit determined	30/09/2016	Permit issued to Orsted REnescience Northwich O & M Limited.
Environment Agency Variation determined EPR/VP3338RD/V002	15/03/2017	Varied and consolidated permit issued in modern condition format.
Application EPR/VP3338RD/V003	Duly Made 08/09/2017	Application to add Solid Recovered Fuel (SRF) production to the permit.
Schedule 5 Notice dated 09/11/2017	Response received 13/11/2017	Data for derivation of background noise levels.
Variation determined EPR/VP3338RD/V003	Issued 02/03/2018	Varied and consolidated permit issued in modern condition format.
Application EPR/VP3338RD/V004	Duly made 27/02/2019	Application to add activated carbon odour abatement to the sorting hall, caustic scrubber to the reactor exhaust and to install two additional separators.
Schedule 5 Notice dated 21/03/2019	Response received 05/04/2019	Additional information on revised odour management plan (OMP).
Additional information	Received 24/05/2019	Clarification of Schedule 5 notice response.
Additional information	Received 29/05/2019	Revised OMP.
Additional information	Received 28/06/2019	Details of building containment.
Variation determined EPR/VP3338RD/V004	Issued 18/07/2019	Varied and consolidated permit issued in modern condition format.

Status log of the permit		
Description	Date	Comments
Application EPR/VP3338RD/V005 (variation and consolidation)	Duly made 24/12/2020	Variation application to install an acetic acid tank required to store recovered 80% acetic acid which will be used to adjust the pH of process water prior to use at the facility.
Additional information	05/05/2020	Revised site plan.
Variation determined and consolidation issued EPR/VP3338RD	25/05/2021	Varied and consolidated permit issued in modern format.
Regulation 61 Notice sent to Operator	22/04/2021	Regulation 61 Notice requiring information for statutory review of permit.
Regulation 61 Notice response	22/10/2021	Response received from the operator.
Application EPR/VP3338RD/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/VP3338RD	22/09/2023	Varied and consolidated permit issued.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

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

Permit number

EPR/VP3338RD

Issued to

Orsted REnescience Northwich O & M Limited (“the operator”)

whose registered office is

5 Howick Place

London

England

SW1P 1WG

company registration number 09666501

to operate a regulated facility at

REnescience Northwich

Lostock Works

Griffiths Road

Lostock Gralam

Cheshire

CW9 7NU

to the extent set out in the schedules.

The notice shall take effect from 22/09/2023

Name	Date
Anne Lloyd	22/09/2023

Authorised on behalf of the Environment Agency

Schedule 1

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

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/VP3338RD

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/VP3338RD/V006 authorising,

Orsted REnescience Northwich O & M Limited (“the operator”),

whose registered office is

5 Howick Place

London

England

SW1P 1WG

company registration number 09666501

to operate an installation and waste operation at

REnescience Northwich

Lostock Works

Griffiths Road

Lostock Gralam

Cheshire

CW9 7NU

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

Name	Date
Anne Lloyd	22/09/2023

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 A19) 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 A19) 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 A19) 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 AR19) Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

2.2 The site

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

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 tables S2.2 and table S2.3.
 - (b) it conforms to the description in the documentation supplied by the producer and holder.
 - (c) the facility has sufficient free capacity to store and treat the waste.
- 2.3.5 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 A19) 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 (AR6).
- (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 shutdown of each MCP as short as possible.
- there must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993

2.4 Improvement programme

- 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

3 Emissions and monitoring

3.1 Emissions to water, air or land

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

3.4 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;
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2, S3.3.unless otherwise agreed in writing by the Environment Agency.
- 3.5.5 In the case of new medium combustion plant, the first monitoring measurements shall be carried out within four months of the issue date of the permit or the date when the MCP is first put into operation, whichever is later.
- 3.5.6 Monitoring shall not take place during periods of start-up or shut-down.

3.6 Pests

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

3.6.2 The operator shall:

- (a) only use approved products for pest control;
- (b) treat pest infestations promptly;
- (c) reject pest-infected incoming waste;
- (d) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
- (e) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.7 Fire prevention

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.

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. Reporting

4.1.3 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.

4.1.4 For the following activities referenced in schedule 1, table S1.1 (AR1 to AR19) 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.

4.1.5 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.
- 4.1.6 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.
- 4.1.7 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.
- 4.1.8 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.
- 4.1.9 The operator shall submit an annual report detailing the efficiency of removal of non-compostable and non-digestible materials from feedstock prior to processing and the level of contamination in the final recovered digestate and/or compost.

4.2 Notifications

- 4.2.1 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.
- 4.2.2 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.
- 4.2.3 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.
- 4.2.4 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.

4.2.5 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.

4.2.6 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.

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

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

4.3 Interpretation

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

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

Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
AR1	S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment.	R3: Recycling/reclamation of organic substances which are not used as solvents	From receipt of waste through to digestion and recovery of by-products (digestate). Anaerobic digestion of waste in four tanks followed by burning of biogas produced from the process. Treatment of waste in enclosed buildings fitted with appropriate odour abatement. Waste types suitable for acceptance are limited to those specified in Table S2.2.
AR2	S5.4 A(1) (a) (ii) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical treatment	D9: Treatment for disposal of non-hazardous wastes in the evaporator	From the receipt of waste into the evaporator unit to storage and disposal of the concentrate. Treatment of wastewater from the onsite processes only.
AR3	S5.4 A(1) (b) (ii) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving pre-treatment of waste for incineration or co-incineration.	R3: Recycling/reclamation of organic substances which are not used as solvents. D9: Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12	Preparation of Solid Recovered Fuel from Refuse Derived Fuel involving shredding and windsifting.
Directly Associated Activity			
AR4	Storage of waste pending recovery or disposal	R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage, pending collection,	Undertaken in relation to Activity AR1, AR2 or AR3. From the receipt of permitted waste to pre-

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)	<p>treatment and despatch for anaerobic digestion on site.</p> <p>Storage of residual wastes from pre-treatment to despatch off-site for recovery.</p> <p>Storage of waste in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with a sealed drainage system.</p> <p>Waste types suitable for acceptance are limited to those specified in Table S2.2</p>
AR5	<p>Physico-chemical and Biological treatment for the purpose of recycling – including:</p> <ul style="list-style-type: none"> • Pre-treatment of waste to remove oversized and unsuitable materials • Pre-treatment of waste with enzymes. • Mechanical treatment of wastes from the bioreactor. • Sorting and baling of wastes to make Refuse Derived Fuel (RDF). • Post treatment of digestate and biogas. • Pasteurisation of digestate after anaerobic digestion <p>Washing of grit</p>	<p>R3: Recycling/reclamation of organic substances which are not used as solvents</p> <p>R4: Recycling/reclamation of metals and metal compounds</p> <p>R5: Recycling/reclamation of other inorganic compounds</p>	<p>Undertaken in relation to Activity AR1 or AR2.</p> <p>From the receipt of waste to despatch for anaerobic digestion biological treatment or despatch off site for recovery.</p> <p>Pre-treatment and treatment of waste shall be undertaken in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with a sealed drainage system.</p> <p>Pre-treatment of waste within the hydrothermal tank and with enzymes in the bioreactor tanks for the purpose of recovery.</p> <p>Pre-treatment of waste includes sorting, screening, mixing and maceration.</p> <p>Post-treatment of digestate in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with a sealed drainage system,</p>

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
			<p>including screening to remove contraries, centrifuge or pressing and addition of thickening agents (polymers) or drying for use in land reclamation (however, drying for the purpose of use as a fuel is not permitted).</p> <p>Heat treatment (pasteurisation) of waste in three tanks for the purpose of recovery.</p> <p>Gas cleaning by biological or physical (carbon filtration) or chemical scrubbing.</p> <p>No treatment of hazardous waste shall be undertaken at the facility.</p> <p>Treatment operations shall be limited to:</p> <p>Heat treatment of waste for the purpose of recovery.</p> <p>Physical treatment to recover 2D and 3D waste, plastic, metals and glass.</p> <p>Physical treatment including screening, crushing, baling and shredding for the purpose of recovery. Only one ballistic separator will be operated at any time.</p> <p>Physical treatment to recover 2D and 3D waste, plastic, metals and glass including manual and mechanical sorting/ separation, screening and shredding of non-hazardous waste for disposal (no more than 50 tonnes per day) or recovery.</p> <p>Washing to remove grit from residual waste.</p> <p>Washing only of recovered grit for recovery.</p>

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
			<p>No treatment of WEEE shall be undertaken at the facility.</p> <p>Waste types suitable for acceptance are limited to those specified in Table S2.2.</p>
AR6	Heat and electrical power supply	R1: Use principally as a fuel to generate energy	<p>From the receipt of biogas produced at the on-site anaerobic digestion process to combustion with the release of combustion gases.</p> <p>Combustion of biogas in four combined heat and power (CHP) engine(s) with an aggregated thermal input of 16 MWth.</p> <p>Combustion of biogas in one auxiliary boiler with an aggregated thermal input of 1.6 MWth.</p>
AR7	Odour abatement	<p>Treatment of odorous gases from the waste reception hall, digestate treatment building (DTB) and brine tank.</p> <p>Treatment of odorous gases from the Sorting Hall and reactor Hall</p>	Treatment of odorous compounds prior to release to air.
AR8	<p>Physico-chemical treatment for the purpose of recycling</p> <ul style="list-style-type: none"> • Biogas cleaning 	R3: Recycling/reclamation of organic substances which are not used as solvents	Treatment of biogas including siloxane removal, desulphurisation and condensate removal
AR9	Biological treatment for the purpose of recycling pH balancing in Liquid Balancing Tank	R3: Recycling/reclamation of organic substances which are not used as solvents	pH balancing as a consequence of biological action within the Liquid Balancing Tank receiving directly tankered liquid wastes and partially treated liquid wastes from the bioreactor.
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.

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
			Use of one auxiliary flare required only during periods of breakdown or maintenance of the CHP engines.
AR11	Combustion of compressed natural gas (CNG)	Combustion of natural gas in the CHP engine.	The combustion of CNG is only to be used for 'start up', and 'shut down' procedures. Storage and combustion of CNG in one or more CHP engine with a thermal input of 3.5 MW _{th} , to start up the process.
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 engines and/or emergency flare.
AR13	Gas storage	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Storage of biogas produced from on-site anaerobic digestion of permitted waste in roof space of digesters. From the receipt of biogas produced at the on-site anaerobic digestion process to despatch for use within the facility.
AR14	Digestate storage	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Undertaken in relation to Activity AR1. From the receipt of processed uncertified digestate produced from the on-site anaerobic digestion process to despatch for use off-site. Storage of processed uncertified liquid digestate in storage tanks. Storage of processed uncertified solid digestate in an enclosed building and on an impermeable surface with a sealed drainage system.

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
			Digestate storage pit shall remain covered.
AR15	Surface water collection and storage	Collection and storage of uncontaminated roof and site surface water in surface water drainage system.	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.
AR16	Air treatment	Collection and treatment of air from the buildings or plant using abatement system – [biofilters, carbon filters, acid scrubbers, particulate filters etc.] prior to release to atmosphere.	From the collection of air from site processes to treatment and release of treated air to atmosphere.
AR17	Storage of treated wastes	R13: Storage of treated waste prior to being sent offsite for recovery D15: Storage of treated waste prior to being sent offsite for disposal	Storage of residual wastes from pre-treatment to despatch off- site for recovery and/or disposal. Storage of waste in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with a sealed drainage system.
AR 18	Raw material storage	Storage of raw materials including acetic acid, lubrication oil, antifreeze, activated carbon, compressed natural gas (CNG), anti-foaming agents (as required) and ferric chloride, glycol and micronutrients (as required).	From the receipt of raw materials to despatch for use within the facility.
AR19	Storage of waste produced on site	Storage of waste pending recovery or disposal. Storage of spent activated carbon, digester/Liquid Balancing Tank grit, and biogas condensate.	From production to despatch off site.
Activity reference	Description of activities for waste operations		Limits of activities
AR20 <u>Waste Transfer Station</u>	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)		Wastes shall be stored for no longer than 3 months. There shall be no storage of hazardous waste at the facility.

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
		Containers containing waste shall be covered and stored on an impermeable surface with a sealed drainage system. Physical treatment including screening, crushing, baling, shredding and pelletising for the purpose of recovery. Waste types as specified in Table 2.3	

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Sections 1 - 6 of the application document in response to section 3 – technical standards, Part B of the application form.	01/12/2015
Additional information	Additional information concerning anaerobic digestion tank bund design.	09/03/2016
Additional information	Addendum to the Application.	07/04/2016
Response to Schedule 5 Notice dated 15/03/2016	Response to question 1 submitting the Fire Prevention Plan and letter providing additional clarification.	08/04/2016 and 20/04/2016
Response to Schedule 5 Notice dated 15/04/2016	Response to question 1-3 and 7-48 detailing Noise control, emission and monitoring, process and output monitoring, site design and site operation and process. Odour abatement and management.	06/05/2016 and 10/05/2016 01/07/2016
Additional Information	Additional information relating to Odour Management also Waste bunker design and management.	15/07/2016
Additional Information	Additional information relating to Waste bunker construction and management.	16/08/2016
Response to Schedule 5 Notice dated 19/08/2016	Response to question 1 and 30 detailing clarification of operations and process monitoring.	07/09/2016
Response to Schedule 5 Notice dated 19/08/2016	Odour management plan reference Attachment 1 in response to Schedule 5 dated 19/08/2016.	07/09/2016
Variation Application EPR/VP3338RD/V003	Supporting information document dated 23/08/17 JER1131_Application_to_Vary_Permit_EPRVP3338RD_V2 Non-Technical Summary and Section 2 Description of Process Changes and Management Techniques.	Duly Made 08/09/2017
Variation Application EPR/VP3338RD/V004	Supporting information document dated February 2019 JER 1131 Application to Vary Permit EPR/VP3338/RD/V003 All sections	Duly made 27/02/2019
Response to Schedule 5 Notice dated 21/03/2019	Additional information on revised odour management plan (OMP).	Received 05/04/2019
Additional information	Clarification of Schedule 5 notice response.	24/05/2019
Additional information	Revised odour management plan.	29/05/2019
Additional information	Details of building containment.	28/06/2019

Table S1.2 Operating techniques		
Description	Parts	Date Received
Variation Application EPR/VP3338RD/V005	Supporting information document dated 22/12/2020 201222_R_JER1131_TC_Acetic Acid Minor Variation_V2R0 and Appendix C (Tank and Scrubber Specifications) and Appendix D (Work Instructions).	Duly Made 24/12/2020
Response to Regulation 61 Notice dated 22/04/2021	<ul style="list-style-type: none"> Annex 1 Returns Spreadsheet Compliance and operating techniques identified in response to BAT Conclusions 1 to 8, 10 to 24 and 33 to 38 in the Waste Treatment BREF published on 17 August 2018. 	Received 22/10/2021

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1 to IC8	Improvement Conditions 1 to 8	Completed
Odour Management Plan		
IC9	<p>The operator shall submit a revised odour management plan (OMP) to the Environment Agency detailing the monitoring of all the odour abatement systems in order to establish the saturation profile of the system.</p> <p>The revised plan will review the current monitoring within the OMP (especially Section 5.8) and provided appropriate monitoring to be able to ascertain when the abatement systems are becoming saturated.</p> <p>The revised OMP shall be submitted to the Environment Agency for approval. Any necessary measures or improvements shall be undertaken by the times stipulated by the Environment Agency.</p> <p>Also, the revised OMP or other part of the EMS (as agreed in writing with the Environment Agency) shall include appropriate management of the odour abatement plant to prevent fire from self-heating of activated carbon.</p> <p>Once approved, the plan shall be implemented from the date stipulated by the Environment Agency and incorporated into the EMS. The documents and procedures set out in the EMS shall form the written management system referenced in condition 1.1.1 (a) of the permit.</p>	2 months from issue of this permit
IC10 to IC12	Improvement Conditions 10 to 12	Completed
IC13	<p>The operator shall review the site EMS and update it for any changes to address points identified during plant commissioning.</p> <p>The operator shall submit a written copy of the updated Environmental Management System (EMS) to the Environment Agency and make available for inspection all documents and procedures which form part of the site EMS.</p>	6 months from issue of this permit
IC14 to IC15	Improvement Conditions 14 to 15	Completed

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
Improvement condition for secondary containment design		
IC16	<p>The operator shall submit a written ‘secondary and tertiary containment plan’ and shall obtain the Environment Agency’s written approval to it. The plan shall contain the results of 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.</p> <p>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.</p> <p>The plan shall include:</p> <ul style="list-style-type: none"> • 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 <p>The plan shall be implemented in accordance with the Environment Agency’s written approval.</p>	6 months from issue of this permit
Improvement condition for operational storage capacity		
IC17	<p>The operator shall provide a written “operational contingency storage plan” and shall obtain the Environment Agency’s written approval to it. The plan shall contain the results of a review of the current storage of digestate produced from site operations. The review shall examine site contingency arrangements in the event of closed landspreading periods, extreme weather conditions, site closure, disease outbreak etc.</p> <p>The contingency storage plan shall include:</p>	6 months from issue of this permit

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<p>Additional storage capacity on-site (at least 2 months storage) and storage capacity off-site;</p> <p>Identification of alternative outlets for digestate – identify companies /permitted waste facilities that would be able to manage the digestate output, taking into account their permits and capacity constraints.</p> <p>The plan shall be implemented in accordance with the Environment Agency’s written approval.</p>	
Improvement condition for review of effectiveness of abatement plant		
IC18	<ul style="list-style-type: none"> • The operator shall carry out a review of the abatement plant on site, to determine whether the measures have been effective and adequate to prevent and where not possible minimise emissions released to air including but not limited to odour and ammonia. • The operator shall submit a written report to the Environment Agency following this review for assessment and approval. • The report shall include but not limited to the following aspects: • Full investigation and characterisation of the waste gas streams. • Abatement stack monitoring results (not limited to odour and ammonia) • Abatement process monitoring results (not limited to odour and ammonia) • Details of air quality quantitative impact assessment including modelling and a proposal for site-specific “action levels” (not limited to odour concentration, hydrogen sulphide and ammonia). • Odour monitoring results at the site boundary • Records of odour complaints and odour related incidents • Recommendations for improvement including the replacement or upgrading the abatement plant • Timescales for implementation of improvements to the abatement plant 	12 months from issue of this permit

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<ul style="list-style-type: none"> 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		
IC19	<p>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.</p> <p>The report shall include but not limited to:</p> <ol style="list-style-type: none"> Ventilation design performance criteria for effective fugitive odorous emission control 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. 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. <p>Ventilation and abatement systems should be designed by suitably qualified named engineers who can supervise and sign-off on construction quality assurance.</p>	6 months from issue of this permit
Improvement condition for assessment of methane slip		
IC20	<p>The operator shall establish the methane emissions in the exhaust gas from engines burning biogas and compare these to the manufacturer's specification and benchmark levels agreed in writing with the Environment Agency. The operator shall, as part of the methane leak detection and repair (LDAR) programme, develop proposals to assess the potential for methane slip and take corrective actions where emissions above the manufacturer's specification or appropriate benchmark levels are identified.</p>	6 months from issue of this permit

Schedule 2 – Waste types, raw materials and fuels

Raw materials and fuel description	Specification
Copper Oxide Impregnated Carbon	>90% w/w activated carbon >5% w/w copper oxide
Acid Impregnated Carbon	>90% w/w activated carbon >5% w/w citric acid
Sodium hydroxide (NaOH)	32% solution
Sodium hypochlorite (NaOCl)	15% solution
Diesel	Maximum 0.1% sulphur content

Maximum quantity	Annual throughput shall not exceed 144,000 tonnes minus any tonnage of waste taken for the Waste Transfer Station (Activity A17) under Table S2.3.
Exclusions	<p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> • biodegradable wastes that is significantly contaminated with non-compostable or digestible contaminants, in particular plastic and litter shall 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 03	plant tissue waste
02 01 04	wastes plastics (except packaging)
02 01 07	wastes from forestry
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 02	wastes from preserving agents
02 03 03	wastes from solvent extraction
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	soil from cleaning and washing beet
02 04 03	sludges from on-site effluent treatment – sludges from the processing of sugar
02 05	wastes from the dairy products industry⁽¹⁾
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 02	wastes from preserving agents
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 03	wastes from chemical treatment
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)
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, particle board and veneer other than those mentioned in 03 01 04
03 03	wastes from pulp, paper and cardboard production and processing
03 03 01	waste bark and wood
03 03 02	green liquor sludge (from recovery of cooking liquor)
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10
07	Wastes from organic chemical processes

07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres
07 02 13	waste plastic
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 – virgin timber only
15 01 05	composite packaging meeting EN 13432 or equivalent certified compostable or digestible standard
15 01 06	mixed packaging
15 01 09	textile packaging
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
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 05	wastes from aerobic treatment of solid wastes
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
19 06	wastes from anaerobic treatment of waste
19 06 03	liquor from anaerobic treatment of municipal waste (from a process that accepts wastes which are listed in this table only) and made up of previously pasteurised and stabilised batches only
19 06 04	digestate from anaerobic treatment of source segregated biodegradable waste (from a process that accepts wastes which are listed in this table only) and made up of previously pasteurised and stabilised batches only
19 06 05	liquor from anaerobic treatment of animal and vegetable waste (from a process that accepts wastes which are listed in this table only) and made up of previously pasteurised and stabilised batches only
19 06 06	digestate from anaerobic treatment of animal and vegetable waste (previously digested sewage sludge only)
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 01	paper and cardboard
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 09	minerals (for example sand, stones)
19 12 10	combustible waste (refuse derived fuel)

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 02	glass
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 10	clothes
20 01 11	textiles
20 01 25	edible oil and fat
20 01 30	detergents other than those mentioned in 20 01 29
20 01 32	medicines other than those mentioned in 20 01 31
20 01 38	wood other than that mentioned in 20 01 37
20 01 41	wastes from chimney sweeping
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
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
20 03 03	street-cleaning residues
20 03 07	bulky waste
Note (1)	No more than 10 tonnes total per day on average of any waste with EWC codes 02-05-01 or 02-05-02 will be treated.

Table S2.3 Permitted waste types and quantities for waste transfer station	
Maximum quantity	Annual throughput shall not exceed 30,000 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 containing treated wood, wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed - sludges (except gully and street cleaning wastes) - drummed wastes
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 10	waste metal
02 04	wastes from sugar processing

Table S2.3 Permitted waste types and quantities for waste transfer station	
Maximum quantity	Annual throughput shall not exceed 30,000 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 containing treated wood, wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed - sludges (except gully and street cleaning wastes) - drummed wastes
02 04 01	soil from cleaning and washing beet
02 04 02	off-specification calcium carbonate
02 04 03	sludges from on-site effluent treatment
02 04 99	wastes not otherwise specified
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing
02 05 02	sludges from on-site effluent treatment
02 05 99	wastes not otherwise specified
07	Wastes from organic chemical processes
07 02 13	waste plastic
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 02	plastic packaging
15 01 04	metallic packaging
15 01 07	glass packaging
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 02	wood, glass and plastic
17 02 02	glass
17 02 03	plastic
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 02	ferrous metal
19 12 03	non-ferrous metal
19 12 04	plastic and rubber
19 12 05	glass
19 12 09	minerals (for example sand, stones)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)

Table S2.3 Permitted waste types and quantities for waste transfer station	
Maximum quantity	Annual throughput shall not exceed 30,000 tonnes
Exclusions	Wastes having any of the following characteristics shall not be accepted: <ul style="list-style-type: none"> - consisting solely or mainly of dusts (except sawdust), powders, or loose fibres - wastes containing treated wood, wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed - sludges (except gully and street cleaning wastes) - drummed wastes
20 01 02	glass
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 39	plastics
20 01 40	metals
20 02	garden and park wastes (including cemetery waste)
20 02 02	soil and stones

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		
Existing medium combustion plant which are engines fuelled on biogas (1 MW to 5 MW)								
A1 to A4 on site plan in Schedule 7	CHP engines 1, 2, 3 and 4 stacks [note 1]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	500 mg/m ³	Average over sample period	Annual	BS EN 14792		
		Sulphur dioxide	350 mg/m ³ [note 2]			BS EN 14791 or CEN TS 17021 or by calculation based on fuel sulphur		
		Sulphur dioxide	162 mg/m ³ [note 3]					
		Carbon monoxide	1400 mg/m ³			BS EN 15058		
		Total VOCs	No limit set			--	--	BS EN 12619
A5 on site plan in Schedule 7	Emergency flare stack [note 5]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	150 mg/m ³	Average over sample period	[note 6]	BS EN 14792		
		Carbon monoxide	50 mg/m ³			BS EN 15058		
		Total VOCs	10 mg/m ³			BS EN 12619		
A6 on site plan in schedule 7	Main Building Carbon Filter vent	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
A7 on site plan in schedule 7	Digestate Treatment Building Carbon Filter vent	Hydrogen sulphide	No limit set	Average over sample period	Once every 6 months	CEN TS 13649 for sampling		

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
						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
A8 on site plan in schedule 7	Brine Tank via carbon filter	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
A9 on site plan in schedule 7	Sorting Hall Carbon filter vent	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
A10 on site plan in schedule 7	Reactor Hall Scrubber unit vent	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
A11 on site plan in schedule 7	Acetic acid tank via Scrubber	Hydrogen sulphide	No limit set	Average over sample period	Once every 6 months	CEN TS 13649 for sampling

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
						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
Pressure relief valves	Digesters/Digestate storage tank(s)	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--
	Brine Tank	No parameter set	No limit set	--	--	--
	Liquid Balancing Tank	No parameter set	No limit set	--	--	--
Vents from tanks	Compressed Natural Gas mobile 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 medium combustion plants other than engines and gas turbines burning biogas).

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

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

Note 4 – These emission limits are based on normal operating conditions and load - temperature 0°C (273K); pressure 101.3 kPa and oxygen 3%.

Note 5 – Following commissioning, monitoring to be undertaken in the event the emergency flare has been operational for more than 10 per cent of a year (876 hours). Record of operating hours to be submitted annually to the Environment Agency.

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 on site plan in schedule 7 emission to Wade Brook	Uncontaminated site surface water from roofs and non-operational areas	Oil and grease	No visible oil or grease	--	Weekly	Visual assessment
		Suspended Solids	No limit set	--	To be agreed in writing with the Environment Agency.	To be agreed in writing with the Environment Agency.
		pH				
		Ammoniacal Nitrogen				
		Chemical Oxygen Demand				
	Electrical Conductivity					
	Uncontaminated site surface water from the secondary bunded area	Suspended Solids	50 mg/l	--	Prior to discharge	To be agreed in writing with the Environment Agency.
		pH	6 to 9			
		Ammoniacal Nitrogen	No limit			
		Chemical Oxygen Demand	No limit			
Electrical Conductivity		No limit				

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Digester feed (digestion process)	pH	As described in site operating techniques	As described in site operating techniques	Process monitoring to be recorded using a SCADA system where relevant.
	Alkalinity			
	Temperature			
	Hydraulic loading rate			
	Organic loading rate			
	Volatile fatty acids concentration			
	Ammonia			
Liquid /foam level				
Biogas in digester	Flow	Continuous	In accordance with EU weights and measures Regulations	Process monitoring to be recorded using a SCADA system where relevant.
	Methane	Continuous	None specified	

	CO ₂	Continuous	None specified	Gas monitors to be calibrated every 6 months or in accordance with the manufacturer's recommendations
	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	BS EN 15446 In accordance with the LDAR programme	Monitoring points as specified in a DSEAR risk assessment and LDAR programme. Limit as agreed with the Environment Agency as a percentage of the overall gas production.
CHP engine stack(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 SCADA system or similar system	Date, time and duration of use of auxiliary flare shall be recorded.
	Quantity of gas sent to emergency flare			Quantity can be estimated from gas flow composition, heat content, ratio of assistance, velocity, purge gas flow rate, pollutant emissions.
Pressure relief valves and vacuum systems	Gas pressure	Continuous	Recording using a SCADA system	Continuous gas pressure shall be monitored.
	Re-seating	Weekly inspection	Visual	Operator must ensure that valves are re-seated after release in accordance with the manufacturer's design.
	Inspection, maintenance, calibration, repair and validation	Following foaming or overtopping or at 3 yearly intervals whichever is sooner	Written scheme of examination in accordance with condition 1.1.1	After a foaming event or sticking, build-up of debris, obstructions or damage, operator must ensure that pressure relief valve function remains within designed gas pressure in accordance with the manufacturer's design by suitably

				trained and qualified personnel.
	Inspection, calibration and validation report	In accordance with design and construction specifications or after over topping or foaming event	Written scheme of examination in accordance with condition 1.1.1	Operator must ensure that valves are re-seated after release, after a foaming event or sticking, build-up of debris, obstructions or damage. Operator must ensure that PRV function remains within designed operation gas pressure in accordance with the manufacturer's design by suitably trained/qualified personnel. Inspection, calibration and validation report. In accordance with industry Approved Code of Practice
Storage lagoons and storage tanks	Volume	Daily	Visual or flow metre measurement	750 mm freeboard must be maintained for storage lagoons. Records of volume must be maintained.
Odour abatement plant				
Scrubber 1,2,3				
Scrubbers	Gas flow rate – inlet and outlet	Continuous	Gas flow meter / EN 16911-1 and MID for EN 16911-1	Odour abatement plant shall be regularly checked and maintained to ensure appropriate temperature and moisture content. Odour abatement plant shall be managed in accordance with permit condition 3.3, the odour management plan and manufacturer's recommendations Equipment shall be calibrated on a 4
	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)	monthly basis, or as agreed in writing by the Environment Agency.
	pH scrubber solution (pre-abatement)	Continuous	pH meter	
	pH scrubber solution (post-abatement)	Continuous	pH meter	
	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 IC18 as approved in writing by the Environment Agency. Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
	Odour concentration – inlet and outlet gas stream	Every 6 months or as agreed in writing by the Environment Agency.	BS EN 13725	Action levels to be agreed on completion of IC18 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.
	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 IC18 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.
Carbon filters 1,2,3,4				
Carbon filters	Carbon bed temperature – inlet and outlet	Continuous	Temperature probe	Odour abatement plant shall be managed in accordance with permit condition 3.3, the odour management plan
	Gas flow rate – inlet and outlet	Continuous	Gas flow meter	
	Moisture or humidity	Daily	Moisture meter	

	Back pressure	Weekly	Recognised industry method	and manufacturer's recommendations
	Efficiency assessment	Annual	Emission removal efficiency (BS EN 13725 for odour removal)	Carbon filter(s) to be replaced in accordance with manufacturer's recommendations Equipment shall be calibrated on a 4 monthly basis, or as agreed in writing by the Environment Agency.
	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 IC18 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 IC18 as approved in writing by the Environment Agency. Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
	Odour concentration – inlet and outlet gas stream	Every 6 months or as agreed in writing by the Environment Agency.	BS EN 13725	Action levels to be agreed on completion of IC18 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			
Emissions to air from CHP engines Parameters as required by condition 3.5.1.	A1 to A4	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.	A6 to A11	Every 6 months	1 January, 1 July
Emissions to water and land Parameters as required by condition 3.5.1	W1	Every 12 months	1 January
Process monitoring – digester tank integrity Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.3	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 S3.3	Every 12 months Yearly summary report of over-pressure and under-pressure events detailing mass balance release	1 January
Process monitoring – leak detection and repair (inspection, calibration and maintenance) Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.3	Every 3 years	1 January
Process monitoring – use of emergency flare Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.3	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	
Total annual VOCs emissions from gas engines (calculated)	As specified in schedule 3 table S3.3	Every 12 months	1 January

Table S4.2 Annual production/treatment	
Parameter	Units
Electricity generated	MWh
Biomethane generated	tonnes or m ³
Whole digestate	tonnes

Table S4.2 Annual production/treatment	
Parameter	Units
Liquid digestate	tonnes or m ³
Solid digestate	tonnes
Recovered outputs	tonnes

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

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	DD/MM/YYYY
Process monitoring	Form process 1 or other form as agreed in writing by the Environment Agency	DD/MM/YYYY
Water	Form water 1 or other form as agreed in writing by the Environment Agency	DD/MM/YYYY
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	DD/MM/YYYY
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	DD/MM/YYYY
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	DD/MM/YYYY
Waste returns	E-waste Return Form or other form as agreed in writing by the Environment Agency	--

Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution

To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit

To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

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

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

Part B – to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

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

“ADQP” means Anaerobic Digestion Quality Protocol

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

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

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

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

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

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

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

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

“Biodegradable” means a material is capable of undergoing biological anaerobic or aerobic degradation leading to the production of CO₂, H₂O, methane, biomass, and mineral salts, depending on the environmental conditions of the process.

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

“Capacity” means the potential capacity and not historical or actual production levels or throughput. This means that the designed capacity is the maximum rate at which the site can operate. Biological treatment of waste usually takes place over more than one day, so the physical daily capacity can be calculated by dividing the maximum quantity of waste that could be subject to biological treatment at any one time by the minimum residence time. For in-vessel composting, the residence time for sanitisation should be calculated separately and then aggregated to the complete composting time. Further guidance ‘[RGN2: Understanding the meaning of regulated facility Definition of regulated facility](#)’ is available.

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

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

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

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

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

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

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

‘direct discharge’ means discharge to a receiving water body

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

“digestate” means material resulting from an anaerobic digestion process.

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

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

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

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

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

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

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“Leak detection and repair (LDAR) programme” means a structured approach to reduce fugitive emissions of organic compounds by detection and subsequent repair or replacement of leaking components.

Currently, sniffing (described by EN 15446) and optical gas imaging methods are available for the identification of leaks as set out in BAT 14 and section 6.6.2 of the Waste Treatment BAT Conclusions.

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

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

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

“Medium Combustion Plant Directive” or “MCPD” means Directive 2015/2193/EU of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

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

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

“operator” means in relation to a regulated facility:

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

“pests” means Birds, Vermin and Insects.

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

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

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

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

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

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

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

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

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

“stable, stabilised” means the degree of processing and biodegradation at which the rate of biological activity has slowed to an acceptably low and consistent level and will not significantly increase under favourable, altered conditions.

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

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

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

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

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

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

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

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

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



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Annex 1 of MCP

1. Rated thermal input (MW) of the medium combustion plant.	4 Engines – 1.5 MW per engine Total -= 6MW
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	CHP
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	biogas
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	23/01/2017
5. Sector of activity of the medium combustion plant or the facility in which it is applied (NACE code).	38.21
6. Expected number of annual operating hours of the medium combustion plant and average load in use.	8000
7. Where the option of exemption under Article 6(3) or Article 6(8) is used, a declaration signed by the operator that the medium combustion plant will not be operated more than the number of hours referred to in those paragraphs.	Parasitic load = 4.5%
8. Name and registered office of the operator and, in the case of stationary medium combustion plants, the address where the plant is located.	Orsted Renaissance Northwich O & M Limited 5 Howick Place London England SW1P 1WG Orsted Renscience Northwich Lostock works Griffiths Road Lostock Gralam Cheshire CW9 7NU

END OF PERMIT