

# Notice of variation and consolidation with introductory note

**The Environmental Permitting (England & Wales) Regulations 2016**

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Renewi UK Services Limited

South Kirkby Waste Management Facility  
South Kirkby Industrial Park  
South Kirkby  
West Yorkshire  
WF9 3SD

**Variation application number**

EPR/VP3535CL/V006

**Permit number**

EPR/VP3535CL

# South Kirkby Waste Management Facility

## Permit number EPR/VP3535CL

### 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

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 installation is located to the south east of Hemsworth and 1 km north-west of South Kirkby. The former land use at the site was the South Kirkby and Ferrymoor Riddings collieries. The site is now part of the South Kirkby Industrial Park at Grid reference SE 44700 11800.

The land to the north and west of the site is designated for proposed industrial development. An educational training centre is located 20 metres to the west of the proposed development. The closest residential receptors are associated with the settlement of South Kirkby located approximately 300 metres to the south. The predominant land use surrounding the site is agricultural or areas of open space. Two fishing lakes are located approximately 10 metres to the south.

The installation is designed to process up to 242,600 tonnes per annum of predominantly household, commercial and industrial waste.

The South Kirkby facility comprises the following installation activities:

- Anaerobic Digestion (AD)
- Residual Waste Treatment Facility (RWTF) and Mixed Dry Recyclables Materials Recycling Facility (MDR MRF)
- In-vessel Composting Facility (IVC)
- Effluent Treatment Plant (ETP)

The South Kirkby facility comprises a number of directly associated activities, as specified in Table S1.1 of the notice.

The South Kirkby facility comprises the following waste operations:

- Autoclave (AC)
- Residual Waste Treatment Facility MRF and Mixed Dry Recyclables Facility (MDR MRF)
- Household Waste Recycling Centre (HWRC)

Co-mingled mixed dry recyclate including paper, card, plastics, cans and glass is accepted on site and sorted in the MDR MRF. The segregated recyclate is then baled and dispatched off site for recovery. Any rejected material going through the MDR MRF is transferred to the RWTF.

The IVC facility processes source segregated green waste, where it is shredded to create a more consistent bulked material which is then loaded into the composting tunnels. This material is then transferred into the maturation area where it is stored for typically 2 weeks before being screened and dispatched as compost. Any rejects from the screening process are shredded, and mixed back in with the input material.

The RWTF processes the residual waste streams as well as any rejects from the composting and MDR MRF input material which can be accepted. The material is sorted into organic fractions and several separate output streams including RDF which is sent to an energy recovery facility. The organic fractions of the incoming waste are separated and processed in the autoclave prior to treatment at the AD plant.

The AD plant receives the organic fractions generated from the autoclave process or directly from the MRF in the RWTF. The biogas obtained from the AD is used to generate electricity and heat from two CHP engines with an aggregated thermal input of 5.6 MWth. The heat produced from the engines is recovered and integrated in the process heating requirements within the facility including a district heating system. The digestate from the process is de-watered, stored temporarily on site and despatched for use on land or landfills. The spreading of digestate is not included or authorised by this Environmental Permit.

The ETP on site collects waste liquid streams from the processes including IVC leachate & centrifuged AD water after anaerobic digestion, applies treatment and settlement as required before disposing of water to sewer.

Main releases to the environment are to air and sewer. Site surface water is collected in a balancing pond with excess water discharged to an off-site reed bed. Process effluent from the activity is re-circulated within the anaerobic digestion process or treated via the ETP.

There are no European Habitat sites within 10 km of the installation. There are no Sites of Special Scientific Interest (SSSIs) within 2 km of the installation. The following Local Wildlife Sites are within 2 km from the installation:

- South Kirby Colliery Yard
- South Kirkby Quarry
- Mutton Flats
- Johnny Brown's Common
- Hull to Barnsley Disused Railway

Previous assessment by the Environment Agency has indicated that emissions from the installation are unlikely to have a significant impact at the ecological sites.

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

The schedules specify the changes made to the permit.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application EPR/VP3535CL/A001	Duly made 29/03/2012	Application for a waste management facility incorporating household waste recycling centre, materials recycling plant, composting, anaerobic digestion and combustion operations.
Request for additional information dated 15/05/2012	Response received 07/06/2012	Revised list of wastes to be accepted on site and detailed plant description.
Request for additional information dated 15/06/2012	Response received 21/06/2012	Clarification of point source emissions to off-site reed bed and sewer.
Request for additional information dated 25/06/2012	Response received 25/06/2012	Revised site plan.
Permit determined EPR/VP3535CL/A001 /EAWML 103892	29/06/2012	Permit issued to Shanks Waste Management Limited.
Agency variation determined EPR/VP3535CL/V002	30/05/2013	Agency variation to implement the changes introduced by IED.
Application EPR/VP3535CL/V003 received (variation)	Duly made 05/05/2015	Application for a variation to incorporate an additional drawing showing buildings and emission points; allow the "transfer" of waste from the site for treatment elsewhere and to update the site plan.
Variation determined EPR/VP3535CL	02/07/2015	Varied permit issued.
Application EPR/VP3535CL/V004 received (variation and consolidation)	Duly made 26/08/2014	Application to vary permit to include newly prescribed activities under the Industrial Emissions Directive (IED) and update the permit to modern conditions.
Additional information received	Received 13/04/2015	Site Activity Overview.
Additional information received	Received 28/07/2015	Process Flow Diagram.
Additional information received	Received 07/09/2015	Confirmation of Effluent Treatment Plant activities.
Additional information received	Received 15/12/2015	Confirmation of the removal of animal waste codes from IVC activity.
Variation determined EPR/VP3535CL	18/12/2015	Varied and consolidated permit issued in modern condition format including the changes introduced by IED.
Notified of change of Company Name	12/10/2017	Name changed to Renewi UK Services Limited.
Variation issued EPR/VP3535CL	20/10/2017	Varied permit issued to Renewi UK Services Limited.
Regulation 61 Notice sent to Operator	19/07/2019	Regulation 61 Notice requiring information for statutory review of permit.
Regulation 61 Notice response	18/01/2020	Response received from the operator.
Application EPR/VP3535CL/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	12/11/2020	Varied and consolidated permit issued.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Permit reviewed Variation determined EPR/VP3535CL (Billing Ref: PP3706BQ)		

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/VP3535CL

### Issued to

**Renewi UK Services Limited** (“the operator”)

whose registered office is

**Dunedin House  
Auckland Park  
Mount Farm  
Milton Keynes  
Buckinghamshire  
MK1 1BU**

company registration number **02393309**

to operate a regulated facility at

**South Kirkby Waste Management Facility  
South Kirkby Industrial Park  
South Kirkby  
West Yorkshire  
WF9 3SD**

to the extent set out in the schedules.

The notice shall take effect from 12/11/2020

Name	Date
Rebecca Warren	12/11/2020

Authorised on behalf of the Environment Agency

## **Schedule 1**

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

## **Schedule 2 – consolidated permit**

Consolidated permit issued as a separate document.

# Permit

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

### Permit number

**EPR/VP3535CL**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/VP3535CL/V006 authorising,

**Renewi UK Services Limited** (“the operator”),

whose registered office is

**Dunedin House  
Auckland Park  
Mount Farm  
Milton Keynes  
Buckinghamshire  
MK1 1BU**

company registration number **02393309**

to operate an installation and waste operations at

**South Kirkby Waste Management Facility  
South Kirkby Industrial Park  
South Kirkby  
West Yorkshire  
WF9 3SD**

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

<b>Name</b>	<b>Date</b>
<b>Rebecca Warren</b>	<b>11/12/2020</b>

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 AR16), 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 AR16), 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 AR16), 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 AR16), waste authorised by this permit shall be clearly distinguished from any other waste on the site.

### **2.2 The site**

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

### **2.3 Operating techniques**

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation (“plan”) specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 tables S2.2, S2.3, S2.4, S2.5, S2.6 and S2.7;
  - (b) it conforms to the description in the documentation supplied by the producer and holder; and
  - (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 AR16), 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 (AR8):
- (a) each MCP must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this.
  - (b) the operator must keep periods of start-up and shut-down of each MCP as short as possible.
  - (c) there must be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993.

## **2.4 Hazardous waste storage and treatment**

- 2.4.1 Hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.

## **2.5 WEEE treatment**

- 2.5.1 The storage (including temporary storage) and treatment of WEEE shall be carried out in accordance with the technical requirements of Annex VIII of the WEEE Directive.

## **2.6 Improvement programme**

- 2.6.1 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.
- 2.6.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

# **3 Emissions and monitoring**

## **3.1 Emissions to water, air or land**

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

## **3.2 Emissions of substances not controlled by emission limits**

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

3.2.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
- (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

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

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

### **3.3 Odour**

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

### **3.4 Noise and vibration**

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

3.4.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

### **3.5 Monitoring**

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

- (a) point source emissions specified in tables S3.1, S3.2 and S3.3;
- (b) process monitoring specified in table S3.4.

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

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

3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2 and S3.3 unless otherwise agreed in writing by the Environment Agency.

### **3.6 Pests**

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

3.6.2 The operator shall:

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

### **3.7 Fire prevention**

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

3.7.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
- (b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## **4 Information**

### **4.1 Records**

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

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
  - (i) off-site environmental effects; and
  - (ii) matters which affect the condition of the land and groundwater.

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

## 4.2 Reporting

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

4.2.2 For the following activities referenced in schedule 1, table S1.1 (AR1 to AR16), a report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
- (b) the annual production/treatment data set out in schedule 4 table S4.2; and
- (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

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

- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

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

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

4.2.6 The operator shall submit to the Environment Agency a bi-annual report of the efficiency of the biofilter in the first year of compost operations. This shall include but not be limited to, the assessment of the efficiency to reduce odours, the summary of maintenance and any re-commissioning planned or conducted, assessment of back pressure, venting and cracking. Thereafter the operator shall submit the report within one month of the end of each year, unless otherwise agreed in writing by the Environment Agency.

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

## 4.3 Notifications

4.3.1 In the event:

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

- (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
- (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition the operator must immediately—
  - (i) inform the Environment Agency, and
  - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

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

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

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

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

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

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

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

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

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

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

#### **4.4 Interpretation**

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

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



# Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
AR1 Anaerobic digestion	S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving biological treatment.	R3: Recycling/reclamation of organic substances which are not used as solvents	From receipt of waste through to digestion and recovery of by-products (digestate).  Anaerobic digestion of waste in three 4,300 m <sup>3</sup> digestion tanks followed by burning of biogas produced from the process.  Waste types suitable for acceptance are limited to those specified in Table S2.6.
AR2 Residual Waste Treatment Facility (RWTF) and Materials Recycling Facility (MRF)	S5.4 A(1) (a) (ii) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving physico-chemical treatment	D9: Physico-chemical treatment which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12.  D14: Repackaging prior to submission to any of the operations numbered D1 to D13.	Treatment consisting only of manual sorting, separation, screening, baling, shredding (non-metal waste only) crushing or compaction of wastes into different components for disposal or recovery.  Waste types suitable for acceptance are limited to those specified in Tables S2.2 and S2.5.  Material stored at the site may be transferred for treatment elsewhere to a third party facility.
AR3 In-vessel composting facility	S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving biological treatment.	R3: Recycling/reclamation of organic substances which are not used as solvents	From receipt of waste through to composting and recovery of by-products.  Composting of waste under aerobic conditions in closed composting reactors or in closed vessels/buildings fitted with appropriate odour abatement.  Waste types suitable for acceptance are limited to those specified in Table S2.4.

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
AR4 Effluent treatment plant	S5.4 A(1) (a) (i) Disposal of non-hazardous waste in a facility with a capacity of more than 50 tonnes per day by biological treatment	D8: Biological treatment which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12.	From receipt of site effluent at the effluent treatment plant to discharge to sewer. Waste types suitable for acceptance are limited to those specified in Table S2.7.
	S5.4 A(1) (a) (ii) Disposal of non-hazardous waste in a facility with a capacity of more than 50 tonnes per day by physico-chemical treatment.	D9: Physico-chemical treatment which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12.	
<b>Directly Associated Activity</b>			
AR5	Storage of waste pending recovery or disposal	R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced)  D15: Storage of waste pending any of the operations numbered D1 to D14.	From the receipt of waste to despatch for anaerobic digestion, composting or despatch off site for recovery and/or disposal.  Storage of residual wastes from pre-treatment to despatch off-site for recovery.  Storage of waste in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with a sealed drainage system.  Storage of solid and/or liquid digestate in designated tanks.  Storage of biogas in a designated gas holder - from storage of biogas produced from anaerobic digestion on-site to despatch for combustion via CHP engines, boilers or flare.  Waste types suitable for acceptance are limited to those specified in Table S2.2 to S2.7.

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
AR6	Physical treatment for the purpose of recycling – pre-treatment of waste prior and post-treatment of compost	R3: Recycling/reclamation of organic substances which are not used as solvents	<p>From the receipt of waste to despatch for composting or despatch off site for recovery.</p> <p>Pre-treatment of waste prior to composting in an enclosed building and on an impermeable surface with a sealed drainage system including shredding and screening.</p> <p>Post-treatment of processed compost in an enclosed building and on an impermeable surface with a sealed drainage system including screening to remove contraries.</p> <p>Waste types suitable for acceptance are limited to those specified in Table S2.4.</p>

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
AR7	Physical treatment for the purpose of recycling – pre-treatment of waste prior to anaerobic digestion including autoclaving, and dewatering of waste after anaerobic digestion	R3: Recycling/reclamation of organic substances which are not used as solvents	<p>From the receipt of waste to despatch for anaerobic digestion or despatch off site for recovery.</p> <p>Pre-treatment of waste from the RWTF and MRF prior to anaerobic digestion in an enclosed building and on impermeable surface with a sealed drainage system including autoclave pasteurisation, chemical addition, shredding, sorting, screening, compaction, baling, mixing, dewatering and maceration.</p> <p>Post-treatment of digestate in an enclosed building and on an impermeable surface with a sealed drainage system, including screening to remove contraries, centrifuge or pressing and addition of thickening agents (polymers) or drying for use as a fertiliser or soil conditioner (drying for the purpose of use as a fuel is not permitted).</p> <p>Heat treatment (pasteurisation) of waste in an autoclave for the purpose of recovery.</p> <p>Gas cleaning by biological or chemical scrubbing.</p> <p>Waste types suitable for acceptance are limited to those specified in Tables S2.2 and S2.5.</p>
AR8	Steam and electrical power supply	R1: Use principally as a fuel to generate energy	<p>From the receipt of biogas produced at the on-site anaerobic digestion process to combustion with the release of combustion gases.</p> <p>Combustion of biogas in two combined heat and</p>

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
			<p>power (CHP) engines with an aggregated thermal input of 5.6 MWth (each with an individual thermal input of 2.8 MWth).</p> <p>Combustion of biogas in two auxiliary boilers with an aggregated thermal input of 2.48 MWth (each with an individual thermal input of 1.24 MWth).</p>
AR9	Storage of finished compost and non-composted fraction	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	<p>From the receipt of processed uncertified compost and non-composted fraction produced at the facility to treatment on site and despatch for use off-site.</p> <p>Storage of processed uncertified compost in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with a sealed drainage system.</p>
AR10	Process water collection and storage	Collection and storage of compost liquor/leachate in a leachate storage tank.	<p>From the receipt of compost leachate produced at the facility to use as a feedstock within the anaerobic digestion process.</p> <p>From the receipt of process effluent produced at the facility to despatch for treatment at the facility or despatch off site for recovery or disposal.</p>
AR11	Surface water collection and storage	Collection and storage of uncontaminated roof and site surface water in one attenuation pond	From the collection of roof and site surface water from non-operational areas only to re-use within the facility or discharge to off-site engineered reed bed.
AR12	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.

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
			Use of one auxiliary flare required only during periods of breakdown or maintenance of the CHP engines and/or auxiliary boilers.
AR13	Raw material storage	Storage of raw materials including lubricating oil, antifreeze, ferric chloride and anti-foaming agent.	From the receipt of raw materials to despatch for use within the facility.
AR14	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 one 1,040m <sup>3</sup> gas holder.  From the receipt of biogas produced at the on-site anaerobic digestion process to despatch for use within the facility.
AR15	Digestate storage	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	From the receipt of processed uncertified digestate produced from the on-site anaerobic digestion process to despatch for use off-site.  Storage of processed uncertified solid digestate in the enclosed residual waste treatment building and on an impermeable surface with a sealed drainage system.
AR16	Air treatment	Collection and treatment of air from the buildings or plant using abatement system (biofilters, bio-scrubbers and carbon filters) prior to release to atmosphere.	From the collection of air from site processes to treatment and release of treated air to atmosphere.
<b>Activity reference</b>	<b>Description of activities for waste operations</b>		<b>Limits of activities</b>
AR17 Materials Recycling Facility – MDR and RWTF	R3: Recycling/reclamation of organic substances which are not used as solvents R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of inorganic materials R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding		Treatment operations shall be limited to: Treatment consisting only of manual sorting, separation, screening, baling, shredding (non-metal waste only), and compaction of wastes into different components for disposal or recovery.

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
	temporary storage, pending collection, on the site where it is produced)		<p>Waste types accepted for treatment at the part of the site used for materials recycling operations are specified in Table S2.2 and S2.5.</p> <p>Material stored at the site may be transferred for treatment elsewhere to a third party facility.</p>
AR18 Household Waste Amenity Site	<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 inorganic materials</p> <p>R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p> <p>D9: Physico-chemical treatment which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D12</p> <p>D14: Repackaging prior to submission to any of the operations numbered D1 to D13</p> <p>D15: Storage of waste pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection on the site where the waste is produced)</p>		<p>Treatment operations shall be limited to: Treatment consisting only of manual sorting, separation repackaging or compaction of waste into different components for disposal (no more than 50 tonnes per day) or recovery.</p> <p>Waste types accepted for treatment at the part of the site used for the household waste recycling centre are specified in Table S2.3.</p> <p>Material stored at the site may be transferred for treatment elsewhere to a third party facility.</p>

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application EPR/VP3535CL/A001	<p>Appendix B2_3, EMS in response to section 3d, Part B2 of the application form.</p> <p>Drawings 1 to 5 in response to section 6a, Part B2 of the application form.</p> <p>Site Condition Report: 412.01796.00031/SCR and Appendix SC1 in response to section 6b, Part B2 of the application form.</p> <p>Non-Technical Summary: 412.01796.00031/NTS and Appendix NTS1 in response to section 6c, Part B2 of the application form.</p> <p>H1 Risk Assessment: 412.01796.00031/H1 in response to section 7, Part B2 of the application form.</p> <p>Air Quality Assessment: 412.01796.00031/AQD including all associated drawings in response to section 2, Parts B3 and B4 of the application form.</p> <p>Odour Impact Assessment: 412.01796.00031/OIA including all associated drawings in response to section 2, Parts B3 and B4 of the application form.</p> <p>Appendix BATOT4_Odour Management Plan</p> <p>Appendix BATOT5_Bioaerosol Risk Assessment</p> <p>Appendix 6_Supporting Information</p> <p>Noise and vibration assessment_Appendix 1</p> <p>H1 Risk Assessment: 412.01796.00031/H1_Annex_D in response to section 2, Part B3 of the application form.</p> <p>Document reference: 412.01796.00031/BATOT in response to sections 3a, 3b, 3c, 4a, 6a, 6b, 6c, 6d and 6e, Parts B3 and B4 of the application form.</p> <p>Document reference: 412.01796.00031/BATOT in response to Appendix 1, 2 and 5, section 2, Parts B3 and B4 of the application form.</p> <p>Appendix 2_2 WAMITAB</p> <p>Drawings SK-HWRC-1016; SK-AC-1006; SK-RH-9005; SK-MRF-1010</p>	29/03/2012
Response to Schedule 5 Notice dated	Treatment and odour abatement plant description, revised list of wastes to be accepted on site, control of fugitive	07/06/2012



Table S1.2 Operating techniques		
Description	Parts	Date Received
15/05/2012	emissions of dust and particulates at HWRC, desulphurisation of biogas prior to combustion in CHPs	
Response to email dated 15/06/2012	Clarification of point source emissions to sewer and off-site engineered reed bed on site plan; additional waste codes	21/06/2012
Response to email dated 25/06/2012	Revised site plan - Drawing SK-EXT-1068	25/06/2012
EPR/VP3535CL/V004 – Additional information received	Overall Process diagram	28/07/2015
Full Regulation 61 Notice response	<ul style="list-style-type: none"> <li>Annex 1 Returns Spreadsheet</li> <li>Compliance and operating techniques identified in response to the BAT Conclusions for Waste Treatment published on 17 August 2018.</li> </ul>	18/01/2020

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
<b>Improvement condition for progress report to achieve BAT-AELs</b>		
<b>IC1</b>	<p>The operator shall submit, for approval by the Environment Agency, a report setting out progress to achieving the Best Available Techniques Conclusion Associated Emission Levels (BAT-AELs) where BAT is currently not achieved, but will be achieved before 17 August 2022. The report shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> <li>Current performance against the BAT-AELs.</li> <li>Methodology for reaching the BAT-AELs.</li> <li>Associated targets /timelines for reaching compliance by 17 August 2022.</li> <li>Any alterations to the initial plan (in progress reports).</li> </ol> <p>The report shall address the BAT Conclusions for Waste Treatment with respect to the following:</p> <ul style="list-style-type: none"> <li><b>BAT 20 Table 6.1</b> (compliance with BAT-AELs for direct discharges to a receiving water body)</li> <li><b>BAT 20 Table 6.2</b> (compliance with BAT-AELs for indirect discharges to a receiving water body)</li> <li><b>BAT 34 Table 6.7</b> (compliance with BAT-AELs for channelled NH<sub>3</sub>, odour, dust and TVOC emissions to air from the biological treatment of waste)</li> </ul> <p>Refer to BAT Conclusions for a full description of the BAT requirement.</p>	<p>Progress reports at six monthly intervals from date of permit issue:</p> <p>12/05/2021 12/11/2021 12/05/2022</p>
<b>Improvement condition for progress report to achieve Narrative BAT</b>		
<b>IC2</b>	<p>The operator shall submit, for approval by Environment Agency, a report setting out progress to achieving the 'Narrative' BAT where BAT is currently not achieved, but will be achieved before 17 August 2022. The report shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> <li>Methodology for achieving BAT</li> </ol>	<p>Progress reports at six monthly intervals from date of permit issue:</p> <p>12/05/2021</p>

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
	<p>2) Associated targets /timelines for reaching compliance by 17 August 2022</p> <p>3) Any alterations to the initial plan (in progress reports).</p> <p>The report shall address the BAT Conclusions for Waste Treatment with respect to BAT 1, 2, 3, 6, 7, 8, 10, 12, 19, 23, 35 and 39.</p>	<p>12/11/2021</p> <p>12/05/2022</p>
<b>Improvement condition for secondary containment</b>		
<b>IC3</b>	<p>The operator shall submit a written 'secondary and tertiary containment plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review conducted, by a competent person, in accordance with the risk assessment methodology detailed within CIRIA C736 (2014) guidance, of the condition and extent of secondary and tertiary containment systems where all polluting liquids and solids are being stored, treated, and/or handled.</p> <p>The review shall consider, but not be limited to, the storage vessels, bunds, loading and unloading areas, transfer pipework/pumps, temporary storage areas, and liners underlying the site. The plan must contain dates for the implementation of individual improvement measures necessary for the secondary and tertiary containment systems to adhere to the standards detailed/referenced within CIRIA C736 (2014) guidance, or equivalent.</p> <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p>	<p>12/11/2021 or other date as agreed in writing with the Environment Agency</p>
<b>Improvement condition for primary containment</b>		
<b>IC4</b>	<p>The operator shall submit a written 'primary containment plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review conducted, by a competent person, and shall compare the design specification of primary containment systems where all polluting liquids and solids are being stored, treated, and/or handled against the design standards within CIRIA C535 guidance or equivalent.</p> <p>The review shall include:</p> <ul style="list-style-type: none"> <li>• physical condition of all primary containment systems (storage and treatment vessels);</li> <li>• the suitability for providing primary containment when subjected to the dynamic and static loads caused by the vessels' contents;</li> <li>• any work required to ensure compliance with the standards set out in CIRIA C535 or equivalent; and</li> <li>• a preventative maintenance and inspection regime</li> </ul> <p>The plan must contain dates for the implementation of individual improvement measures necessary for the primary containment to adhere to the standards detailed/referenced within CIRIA C535 guidance, or equivalent.</p> <p>The plan shall be implemented in accordance with the Environment Agency's written approval.</p>	<p>12/11/2021 or other date as agreed in writing with the Environment Agency</p>

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
<b>Improvement condition for review of effectiveness of abatement plant</b>		
<b>IC5</b>	<p>The operator shall carry out a review of the abatement plant on site, in order to determine whether the measures have been effective and adequate to prevent and where not possible minimise emissions released to air including but not limited to odour and ammonia.</p> <p>The operator shall submit a written report to the Environment Agency following this review for assessment and approval.</p> <p>The report shall include but not limited to the following aspects:</p> <ul style="list-style-type: none"> <li>• Full investigation and characterisation of the waste gas streams.</li> <li>• Abatement stack monitoring results (not limited to odour and ammonia)</li> <li>• Abatement process monitoring results (not limited to odour and ammonia)</li> <li>• 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).</li> <li>• Odour monitoring results at the site boundary</li> <li>• Records of odour complaints and odour related incidents</li> <li>• Recommendations for improvement including the replacement or upgrading the abatement plant</li> <li>• Timescales for implementation of improvements to the abatement plant</li> </ul> <p>The operator shall implement the improvements in line with the timescales as approved by the Environment Agency.</p>	12/11/2021 or other date as agreed in writing with the Environment Agency
<b>Improvement condition for review of abatement plant design</b>		
<b>IC6</b>	<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"> <li>a) Ventilation design performance criteria for effective fugitive odorous emission control</li> <li>b) Design of the abatement systems that will ensure compliance with the odour condition 3.3. The report shall include a demonstration (whether by a detailed review of technical papers or by trial results) that all odorous chemical compounds and their loading rates expected in the relevant air streams have been considered in the design; and supporting evidence that the odorous compounds will be controlled and/or abated either by operating techniques or by the proposed abatement systems.</li> <li>c) Design alarms and triggers for each relevant scenario to alert the operator to the malfunction of both ventilation and</li> </ol>	12/11/2021 or other date as agreed in writing with the Environment Agency

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
	<p>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> <p>Ventilation and abatement systems should be designed by suitably qualified named engineers who can supervise and sign-off on construction quality assurance.</p>	
<b>Improvement condition for assessment of methane slip</b>		
<b>IC7</b>	<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>	<p>12/11/2021 or other date as agreed in writing with the Environment Agency</p>

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

Raw materials and fuel description	Specification
Chemicals	-
Fuel oil	Sulphur content not exceeding 0.1% by mass

Maximum quantity	Annual throughput shall not exceed 60,000 tonnes
Exclusions	--
Waste code	Description
<b>15</b>	<b>Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
<b>15 02</b>	<b>absorbents, filter materials, wiping cloths and protective clothing</b>
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
<b>19</b>	<b>Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use</b>
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 01	paper and cardboard
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 04	plastic and rubber
19 12 05	glass
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)

<b>Table S2.2 Permitted waste types and quantities for the MDR Materials Recycling Facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 60,000 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
<b>20</b>	<b>Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 01 99	residues from commercial mushroom cultivation
<b>20 03</b>	<b>other municipal wastes</b>
20 03 01	mixed municipal waste
20 03 02	waste from markets

<b>Table S2.3 Permitted waste types and quantities for the Household Waste Recycling Centre</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 12,000 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
<b>17</b>	<b>Construction and demolition wastes (including excavated soil from contaminated sites)</b>
<b>17 01</b>	<b>concrete, bricks, tiles and ceramics</b>
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
<b>17 06</b>	<b>insulation materials and asbestos-containing construction materials</b>
17 06 01*	insulation materials containing asbestos
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 06 05*	construction materials containing asbestos
<b>17 08</b>	<b>gypsum-based construction material</b>
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01

<b>Table S2.3 Permitted waste types and quantities for the Household Waste Recycling Centre</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 12,000 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
<b>20</b>	<b>Municipal wastes (household waste and similar commercial, industrial and institutions wastes) including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 13*	solvents
20 01 14*	acids
20 01 15*	alkalines
20 01 17*	photochemicals
20 01 19*	pesticides
20 01 21*	fluorescent tubes and other mercury-containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 25	edible oil and fat
20 01 26*	oil and fat other than those mentioned in 20 01 25
20 01 27*	paint, inks, adhesives and resins containing dangerous substances
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 29*	detergents containing dangerous substances
20 01 30	detergents other than those mentioned in 20 01 29
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
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 37*	wood containing dangerous substances
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 01 41	wastes from chimney sweeping
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes

<b>Table S2.3 Permitted waste types and quantities for the Household Waste Recycling Centre</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 12,000 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
<b>20 03</b>	<b>other municipal wastes</b>
20 03 01	mixed municipal waste
20 03 07	bulky waste

<b>Table S2.4 Permitted waste types and quantities for the composting facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 25,000 tonnes</b>
<b>Exclusions</b>	<p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> <li>separately collected loads of plastic unless the whole load is certified compostable to BS EN13432</li> <li>co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432</li> <li>food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025.</li> <li>wastes containing wood-preserving agents or other biocides and post-consumer wood</li> <li>wastes containing persistent organic pollutants</li> <li>wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014</li> <li>manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.</li> </ul>
<b>Waste code</b>	<b>Description</b>
<b>02</b>	<b>Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 03	plant-tissue waste
02 01 07	wastes from forestry (biodegradable only)
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
02 02 03	materials unsuitable for consumption or processing
<b>02 03</b>	<b>wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation</b>
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 04	materials unsuitable for consumption or processing (biodegradable only)
02 03 05	sludges from on-site effluent treatment (biodegradable only)
<b>02 04</b>	<b>wastes from sugar processing</b>
02 04 01	soil from cleaning and washing beet
02 04 03	sludges from on-site effluent treatment (biodegradable only)



<b>Table S2.4 Permitted waste types and quantities for the composting facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 25,000 tonnes</b>
<b>Exclusions</b>	<p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> <li>• separately collected loads of plastic unless the whole load is certified compostable to BS EN13432</li> <li>• co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432</li> <li>• food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025.</li> <li>• wastes containing wood-preserving agents or other biocides and post-consumer wood</li> <li>• wastes containing persistent organic pollutants</li> <li>• wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014</li> <li>• manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.</li> </ul>
<b>Waste code</b>	<b>Description</b>
<b>02 05</b>	<b>wastes from the dairy products industry</b>
02 05 01	materials unsuitable for consumption or processing (biodegradable only)
02 05 02	sludges from on-site effluent treatment (biodegradable only)
<b>02 06</b>	<b>wastes from the baking and confectionery industry</b>
02 06 01	materials unsuitable for consumption or processing (biodegradable only)
02 06 03	sludges from on-site effluent treatment (biodegradable only)
<b>02 07</b>	<b>wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)</b>
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials (biodegradable only)
02 07 02	wastes from spirits distillation (biodegradable only)
02 07 04	materials unsuitable for consumption or processing (biodegradable only)
02 07 05	sludges from on-site effluent treatment (biodegradable only)
<b>03</b>	<b>Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard</b>
<b>03 01</b>	<b>Wastes from wood processing and the production of panels and furniture</b>
03 01 01	waste bark and cork – virgin timber only
03 01 05	sawdust, shavings, cuttings, wood and particle board other than those mentioned in 03 01 04 – virgin timber only
<b>03 03</b>	<b>wastes from pulp, paper and cardboard production and processing</b>
03 03 01	waste bark and wood – virgin timber only
03 03 10	fibre rejects only – virgin timber only
<b>15</b>	<b>Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging (excluding veneers, plastic coatings or laminates) certified to EN 13432 or equivalent standard

<b>Table S2.4 Permitted waste types and quantities for the composting facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 25,000 tonnes</b>
<b>Exclusions</b>	<p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> <li>separately collected loads of plastic unless the whole load is certified compostable to BS EN13432</li> <li>co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432</li> <li>food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025.</li> <li>wastes containing wood-preserving agents or other biocides and post-consumer wood</li> <li>wastes containing persistent organic pollutants</li> <li>wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014</li> <li>manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.</li> </ul>
<b>Waste code</b>	<b>Description</b>
15 01 03	wooden packaging – virgin timber only
15 01 05	composite packaging – only biodegradable organic packaging certified to EN 13432 or equivalent standard
15 01 09	textile packaging (made entirely from biodegradable fibres only)
<b>19</b>	<b>Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use</b>
<b>19 05</b>	<b>wastes from aerobic treatment of solid waste</b>
19 05 03	off-specification compost (previously composted sewage sludge only)
<b>19 06</b>	<b>wastes from anaerobic treatment of waste</b>
19 06 03	liquor from anaerobic treatment of municipal waste from a process that accepts waste input types listed in this table or anaerobic digestion permit, and made up of previously pasteurised and stabilised batches only
19 06 04	digestate from anaerobic treatment of municipal waste from a process that accepts waste input types listed in this table or anaerobic digestion permit, 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 waste input types listed in this table or anaerobic digestion permit, 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)
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 01	paper and cardboard (excluding veneers, plastic coatings or laminates)
<b>20</b>	<b>Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard (excluding veneers, plastic coatings or laminates) meeting EN 13432 or equivalent certified standard

<b>Table S2.4 Permitted waste types and quantities for the composting facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 25,000 tonnes</b>
<b>Exclusions</b>	<p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> <li>• separately collected loads of plastic unless the whole load is certified compostable to BS EN13432</li> <li>• co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432</li> <li>• food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025.</li> <li>• wastes containing wood-preserving agents or other biocides and post-consumer wood</li> <li>• wastes containing persistent organic pollutants</li> <li>• wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014</li> <li>• manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.</li> </ul>
<b>Waste code</b>	<b>Description</b>
20 01 08	biodegradable kitchen and canteen waste – containing compostable plastics meeting EN 13432 or equivalent certified standard
20 01 25	edible oil and fat
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 01	biodegradable waste
<b>20 03</b>	<b>other municipal wastes</b>
20 03 02	waste from markets (biodegradable only)

<b>Table S2.5 Permitted waste types and quantities for the RWTF and Materials Recycling Facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 145,600 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
<b>01</b>	<b>Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals</b>
<b>01 01</b>	<b>wastes from mineral excavation</b>
01 01 01	wastes from metalliferous excavation
01 01 02	wastes from non-metalliferous excavation
<b>01 03</b>	<b>wastes from physical and chemical processing of metalliferous minerals</b>
01 03 06	tailings other than those mentioned in 01 03 04 and 01 03 05
01 03 09	red mud from alumina production other than the wastes mentioned in 01 03 07
<b>01 04</b>	<b>wastes from physical and chemical processing of non-metalliferous minerals</b>
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
01 04 11	wastes from potash and rock salt processing other than those mentioned in 01 04 07

<b>Table S2.5 Permitted waste types and quantities for the RWTF and Materials Recycling Facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 145,600 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 04 13	wastes from stone cutting and sawing other than those mentioned in 01 04 07
<b>02</b>	<b>Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 01	sludges from washing and cleaning
02 01 02	animal-tissue waste
02 01 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site
02 01 07	wastes from forestry
02 01 09	agrochemical waste other than those mentioned in 02 01 08
02 01 10	waste metal
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
02 02 01	sludges from washing and cleaning
02 02 02	animal-tissue waste
02 02 03	materials unsuitable for consumption or processing
02 02 04	sludges from on-site effluent treatment
<b>02 03</b>	<b>wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation</b>
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 02	wastes from preserving agents
02 03 03	wastes from solvent extraction
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
<b>02 04</b>	<b>wastes from sugar processing</b>
02 04 01	soil from cleaning and washing beet
02 04 02	off-specification calcium carbonate
02 04 03	sludges from on-site effluent treatment
<b>02 05</b>	<b>wastes from the dairy products industry</b>
02 05 01	materials unsuitable for consumption or processing
02 05 02	sludges from on-site effluent treatment
<b>02 06</b>	<b>wastes from the baking and confectionery industry</b>

<b>Table S2.5 Permitted waste types and quantities for the RWTF and Materials Recycling Facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 145,600 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
02 06 01	materials unsuitable for consumption or processing
02 06 02	wastes from preserving agents
02 06 03	sludges from on-site effluent treatment
<b>02 07</b>	<b>wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)</b>
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials
02 07 02	wastes from spirits distillation
02 07 03	wastes from chemical treatment
02 07 04	materials unsuitable for consumption or processing
02 07 05	sludges from on-site effluent treatment
<b>03</b>	<b>Wastes from wood processing and the production and the production of panels and furniture, pulp, paper and cardboard</b>
<b>03 01</b>	<b>wastes from wood processing and the production of panels and furniture</b>
03 01 01	waste bark and wood
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
<b>03 03</b>	<b>wastes from pulp, paper and cardboard production and processing</b>
03 03 01	waste bark and wood
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
<b>04</b>	<b>Wastes from the leather, fur and textile industries</b>
<b>04 01</b>	<b>wastes from the leather and fur industry</b>
04 01 08	waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
04 01 09	wastes from dressing and finishing
<b>04 02</b>	<b>waste from the textile industry</b>
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
<b>06</b>	<b>Wastes from inorganic chemical processes</b>
<b>06 09</b>	<b>wastes from the MSFU of phosphorous chemicals and phosphorous chemical processes</b>
06 09 02	phosphorous slag
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03
<b>06 11</b>	<b>wastes from the manufacture of inorganic pigments and opacifiers</b>
06 11 01	calcium-based reaction wastes from titanium dioxide production
<b>07</b>	<b>Wastes from organic chemical processes</b>
<b>07 02</b>	<b>wastes from the MFSU of plastics, synthetic rubber and man-made fibres</b>

<b>Table S2.5 Permitted waste types and quantities for the RWTF and Materials Recycling Facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 145,600 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
07 02 13	waste plastic
<b>09</b>	<b>Wastes from the photographic industry</b>
<b>09 01</b>	<b>wastes from the photographic industry</b>
09 01 07	photographic film and paper containing silver or silver compounds
09 01 08	photographic film and paper free of silver or silver compounds
09 01 10	single-use cameras without batteries
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
<b>10</b>	<b>Wastes from thermal processes</b>
<b>10 01</b>	<b>wastes from power stations and other combustion plants (except 19)</b>
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)
10 01 05	calcium-based reaction wastes from flue-gas desulphurisation in solid form
10 01 07	calcium-based reaction wastes from flue-gas desulphurisation in sludge form
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 24	sands from fluidised beds
<b>10 02</b>	<b>wastes from the iron and steel industry</b>
10 02 01	wastes from the processing of slag
10 02 02	unprocessed slag
10 02 08	solid wastes from gas treatment other than those mentioned in 10 02 07
10 02 10	mill scales
10 02 14	sludges and filter cakes from gas treatment other than those mentioned in 10 02 13
10 02 15	other sludges and filter cakes
<b>10 03</b>	<b>wastes from aluminium thermal metallurgy</b>
10 03 02	anode scraps
10 03 05	waste alumina
10 03 16	skimmings other than those mentioned in 10 03 15
10 03 18	carbon-containing wastes from anode manufacture other than those mentioned in 10 03 17
10 03 24	solid wastes from gas treatment other than those mentioned in 10 03 23
10 03 26	sludges and filter cakes from gas treatment other than those mentioned in 10 03 25
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27
10 03 30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03 29
<b>10 04</b>	<b>wastes from lead thermal metallurgy</b>
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09

<b>Table S2.5 Permitted waste types and quantities for the RWTF and Materials Recycling Facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 145,600 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
<b>10 05</b>	<b>wastes from zinc thermal metallurgy</b>
10 05 01	slags from primary and secondary production
10 05 09	wastes from cooling-water treatment other than those mentioned in 10 05 08
10 05 11	dross and skimmings other than those mentioned in 10 05 10
<b>10 06</b>	<b>wastes from copper thermal metallurgy</b>
10 06 01	slags from primary and secondary production
10 06 02	dross and skimmings from primary and secondary production
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09
<b>10 07</b>	<b>wastes from silver, gold and platinum thermal metallurgy</b>
10 07 01	slags from primary and secondary production
10 07 02	dross and skimmings from primary and secondary production
10 07 03	solid wastes from gas treatment
10 07 05	sludges and filter cakes from gas treatment
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
<b>10 08</b>	<b>wastes from other non-ferrous thermal metallurgy</b>
10 08 09	other slags
10 08 11	dross and skimmings other than those mentioned in 10 08 10
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
<b>10 09</b>	<b>wastes from casting of ferrous pieces</b>
10 09 03	furnace slag
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 09 14	waste binders other than those mentioned in 10 09 13
10 09 16	waste crack-indicating agent other than those mentioned in 10 09 15
<b>10 11</b>	<b>wastes from manufacture of glass and glass products</b>
10 11 03	waste glass-based fibrous materials
10 11 10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 09
10 11 12	waste glass other than those mentioned in 10 11 11
10 11 16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15

<b>Table S2.5 Permitted waste types and quantities for the RWTF and Materials Recycling Facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 145,600 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
10 11 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 11 17
<b>10 12</b>	<b>wastes from manufacture of ceramic goods, bricks, tiles and construction products</b>
10 12 01	waste preparation mixture before thermal processing
10 12 05	sludges and filter cakes from gas treatment
10 12 06	discarded moulds
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 12 10	solid wastes from gas treatment other than those mentioned in 10 12 09
10 12 12	wastes from glazing other than those mentioned in 10 12 11
<b>10 13</b>	<b>wastes from manufacture of cement, lime and plaster and articles and products made from them</b>
10 13 01	waste preparation mixture before thermal processing
10 13 04	wastes from calcination and hydration of lime
10 13 07	sludges and filter cakes from gas treatment
10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 03 09
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12
10 13 14	waste concrete and concrete sludge
<b>11</b>	<b>Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy</b>
<b>11 01</b>	<b>wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphatising, alkaline degreasing, anodising)</b>
11 01 10	sludges and filter cakes other than those mentioned in 11 01 09
11 01 14	degreasing wastes other than those mentioned in 11 01 13
<b>11 02</b>	<b>wastes from non-ferrous hydrometallurgical processes</b>
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05
<b>11 05</b>	<b>wastes from hot galvanising processes</b>
11 05 01	hard zinc
11 05 02	zinc ash
<b>12</b>	<b>Wastes from shaping and physical and mechanical surface treatment of metals and plastics</b>
<b>12 01</b>	<b>wastes from shaping and physical and mechanical surface treatment of metals and plastics</b>
12 01 01	ferrous metal filings and turnings
12 01 03	non-ferrous metal filings and turnings



<b>Table S2.5 Permitted waste types and quantities for the RWTF and Materials Recycling Facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 145,600 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
12 01 05	plastics shavings and turnings
12 01 13	welding wastes
12 01 17	waste blasting material other than those mentioned in 12 01 16
12 01 21	spent grinding bodies and grinding materials other than those mentioned in 12 01 20
<b>15</b>	<b>Waste packaging absorbents, wiping cloths, filter materials and protective clothing not otherwise specified</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
<b>15 02</b>	<b>absorbents, filter materials, wiping cloths and protective clothing</b>
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
<b>16</b>	<b>Waste not otherwise specified in the list</b>
<b>16 01</b>	<b>end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)</b>
16 01 03	end-of-life tyres
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15
<b>16 03</b>	<b>off-specification batches and unused products</b>
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 06	organic wastes other than those mentioned in 16 03 05
<b>16 06</b>	<b>batteries and accumulators</b>
16 06 04	alkaline batteries (except 16 06 03)
16 06 05	other batteries and accumulators
<b>16 11</b>	<b>waste linings and refractories</b>
16 11 02	carbon-based linings and refractories from metallurgical processes others than those mentioned in 16 11 01
16 11 04	other linings and refractories from metallurgical processes other than those mentioned in 16 11 03

<b>Table S2.5 Permitted waste types and quantities for the RWTF and Materials Recycling Facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 145,600 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
16 11 06	linings and refractories from non-metallurgical processes others than those mentioned in 16 11 05
<b>17</b>	<b>Construction and demolition wastes (including excavated soil from contaminated sites)</b>
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
<b>17 02</b>	<b>wood, glass and plastic</b>
17 02 01	wood
17 02 02	glass
17 02 03	plastic
<b>17 03</b>	<b>bituminous mixtures, coal tar and tarred products</b>
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
<b>17 04</b>	<b>metals (including their alloys)</b>
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
<b>17 05</b>	<b>soil (including excavated soil from contaminated sites), stones and dredging spoil</b>
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 08	track ballast other than those mentioned in 17 05 07
<b>17 06</b>	<b>insulation materials and asbestos-containing construction materials</b>
17 06 01*	insulation materials containing asbestos
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 06 05*	construction materials containing asbestos
<b>17 08</b>	<b>gypsum-based construction material</b>
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
<b>17 09</b>	<b>other construction and demolition wastes</b>
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

<b>Table S2.5 Permitted waste types and quantities for the RWTF and Materials Recycling Facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 145,600 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
<b>19</b>	<b>Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use</b>
<b>19 01</b>	<b>wastes from incineration or pyrolysis of waste</b>
19 01 02	ferrous materials removed from bottom ash
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 01 14	fly ash other than those mentioned in 19 01 13
19 01 16	boiler dust other than those mentioned in 19 01 15
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17
19 01 19	sands from fluidised beds
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
<b>19 03</b>	<b>stabilised/solidified wastes</b>
19 03 05	stabilised wastes other than those mentioned in 19 03 04
19 03 07	solidified wastes other than those mentioned in 19 03 06
<b>19 04</b>	<b>vitrified waste and wastes from vitrification</b>
19 04 01	vitrified waste
19 04 04	aqueous liquid wastes from vitrified waste tempering
<b>19 05</b>	<b>wastes from aerobic treatment of solid wastes</b>
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
<b>19 06</b>	<b>wastes from anaerobic treatment of waste</b>
19 06 03	liquor from anaerobic treatment of municipal waste
19 06 04	digestate from anaerobic treatment of municipal waste
19 06 05	liquor from anaerobic treatment of animal and vegetable waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
<b>19 08</b>	<b>wastes from waste water treatment plants not otherwise specified</b>
19 08 01	screenings
19 08 02	waste from desanding
19 08 05	sludges from treatment of urban waste water
19 08 09	grease and oil mixture from oil/water separation containing only edible oils and fats
19 08 12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11

<b>Table S2.5 Permitted waste types and quantities for the RWTF and Materials Recycling Facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 145,600 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13
<b>19 09</b>	<b>wastes from the preparation of water intended for human consumption or water for industrial use</b>
19 09 01	solid waste from primary filtration and screenings
19 09 02	sludges from water clarification
19 09 03	sludges from decarbonation
19 09 04	spent activated carbon
19 09 05	saturated or spent ion exchange resins
19 09 06	solutions and sludges from regeneration of ion exchangers
<b>19 10</b>	<b>wastes from shredding of metal-containing wastes</b>
19 10 01	iron and steel waste
19 10 02	non-ferrous waste
19 10 04	fluff-light fraction and dust other than those mentioned in 19 10 03
19 10 06	other fractions other than those mentioned in 19 10 05
<b>19 11</b>	<b>wastes from oil regeneration</b>
19 11 06	sludges from on-site effluent treatment other than those mentioned in 19 11 05
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 01	paper and cardboard
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 04	plastic and rubber
19 12 05	glass
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)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
<b>19 13</b>	<b>wastes from soil and groundwater remediation</b>
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
19 13 06	sludges from groundwater remediation other than those mentioned in 19 13 05
19 13 08	aqueous liquid wastes and aqueous concentrates from groundwater remediation other than those mentioned in 19 13 07
<b>20</b>	<b>Municipal wastes (household waste and similar commercial industrial and institutional wastes) including separately collected fractions</b>

<b>Table S2.5 Permitted waste types and quantities for the RWTF and Materials Recycling Facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 145,600 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 13*	solvents
20 01 14*	acids
20 01 15*	alkalines
20 01 17*	photochemicals
20 01 19*	pesticides
20 01 21*	fluorescent tubes and other mercury-containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 25	edible oil and fat
20 01 26*	oil and fat other than those mentioned in 20 01 25
20 01 27*	paint, inks, adhesives and resins containing dangerous substances
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 29*	detergents containing dangerous substances
20 01 30	detergents other than those mentioned in 20 01 29
20 01 31*	cytotoxic and cytostatic medicines
20 01 32	medicines other than those mentioned in 20 01 31
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
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 37*	wood containing dangerous substances
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 01 41	wastes from chimney sweeping
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes

<b>Table S2.5 Permitted waste types and quantities for the RWTF and Materials Recycling Facility</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 145,600 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
<b>20 03</b>	<b>other municipal wastes</b>
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 04	septic tank sludge
20 03 06	waste from sewage cleaning
20 03 07	bulky waste

<b>Table S2.6 Permitted waste types and quantities for anaerobic digestion</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 65,345 tonnes</b>
<b>Exclusions</b>	<p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> <li>separately collected loads of plastic unless the whole load is certified compostable to BS EN13432</li> <li>co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432</li> <li>food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025.</li> <li>wastes containing wood-preserving agents or other biocides and post-consumer wood</li> <li>wastes containing persistent organic pollutants</li> <li>wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014</li> <li>manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.</li> </ul>
<b>Waste code</b>	<b>Description</b>
<b>02</b>	<b>Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 01	sludges from washing and cleaning – vegetables, fruit and other crops
02 01 02	animal tissue waste
02 01 03	plant tissue waste
02 01 06	animal faeces, urine and manure (including spoiled straw) only
02 01 07	wastes from forestry
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
02 02 01	sludges from washing and cleaning
02 02 02	animal tissue waste

<b>Table S2.6 Permitted waste types and quantities for anaerobic digestion</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 65,345 tonnes</b>
<b>Exclusions</b>	<p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> <li>separately collected loads of plastic unless the whole load is certified compostable to BS EN13432</li> <li>co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432</li> <li>food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025.</li> <li>wastes containing wood-preserving agents or other biocides and post-consumer wood</li> <li>wastes containing persistent organic pollutants</li> <li>wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014</li> <li>manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.</li> </ul>
<b>Waste code</b>	<b>Description</b>
02 02 03	materials unsuitable for consumption or processing
02 02 04	sludges from on-site effluent treatment
<b>02 03</b>	<b>wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation</b>
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
<b>02 04</b>	<b>wastes from sugar processing</b>
02 04 03	sludges from on-site effluent treatment
<b>02 05</b>	<b>wastes from the dairy products industry</b>
02 05 01	materials unsuitable for consumption or processing
02 05 02	sludges from on-site effluent treatment
<b>02 06</b>	<b>wastes from the baking and confectionery industry</b>
02 06 01	materials unsuitable for consumption or processing
02 06 03	sludges from on-site effluent treatment
<b>02 07</b>	<b>wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)</b>
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials
02 07 04	materials unsuitable for consumption or processing
02 07 05	sludges from on-site effluent treatment
<b>04</b>	<b>Wastes from the leather, fur and textile industries</b>
<b>04 02</b>	<b>wastes from the textile industry</b>
04 02 10	organic matter from natural products, e.g. grease, wax
<b>07</b>	<b>Wastes from organic chemical processes</b>

<b>Table S2.6 Permitted waste types and quantities for anaerobic digestion</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 65,345 tonnes</b>
<b>Exclusions</b>	<p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> <li>separately collected loads of plastic unless the whole load is certified compostable to BS EN13432</li> <li>co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432</li> <li>food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025.</li> <li>wastes containing wood-preserving agents or other biocides and post-consumer wood</li> <li>wastes containing persistent organic pollutants</li> <li>wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014</li> <li>manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.</li> </ul>
<b>Waste code</b>	<b>Description</b>
<b>07 01</b>	<b>wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals</b>
07 01 08*	glycerol waste from bio-diesel manufacture from non-waste vegetable oils only
<b>15</b>	<b>Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging – excludes laminates such as Tetrapaks and must conform to BS EN 13432 and not allowed if any non-biodegradable coating or preserving substance is present
15 01 02	biodegradable plastic packaging – must conform to BS EN 13432 and not allowed if any non-biodegradable coating or preserving substance is present
15 01 03	untreated wooden packaging – not allowed if any non-biodegradable coating or preserving substance is present
15 01 05	composite packaging – must conform to BS EN 13432 and not allowed if any non-biodegradable coating or preserving substance is present
<b>16</b>	<b>Wastes not otherwise specified in the list</b>
<b>16 10</b>	<b>aqueous liquid wastes destined for off-site treatment</b>
16 10 02	liquor/leachate from a composting process that accepts waste input types listed in this table only
<b>19</b>	<b>Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use</b>
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
19 02 03	waste types listed within this table, Table S2.2, that have been mixed together only
19 02 06	sludge types from waste listed within this table, Table S2.2, that have been heat treated only
<b>19 06</b>	<b>wastes from anaerobic treatment of waste</b>



<b>Table S2.6 Permitted waste types and quantities for anaerobic digestion</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 65,345 tonnes</b>
<b>Exclusions</b>	<p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> <li>separately collected loads of plastic unless the whole load is certified compostable to BS EN13432</li> <li>co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432</li> <li>food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025.</li> <li>wastes containing wood-preserving agents or other biocides and post-consumer wood</li> <li>wastes containing persistent organic pollutants</li> <li>wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014</li> <li>manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.</li> </ul>
<b>Waste code</b>	<b>Description</b>
19 06 03	liquor from anaerobic treatment of municipal waste (from a process that treats wastes which are listed in this table only)
19 06 04	digestate from anaerobic treatment of source segregated biodegradable waste (from a process that treats wastes which are listed in this table only)
19 06 05	liquor from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table only)
19 06 06	digestate from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table only)
<b>19 08</b>	<b>wastes from waste water treatment plants not otherwise specified</b>
19 08 09	grease and oil mixture from oil/water separation containing only edible oil and fats
19 08 12	sludges from biological treatment of industrial waste water (from a process that treats wastes which are listed in this table only).
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 12	waste types listed in this table, Table S2.2, that have been subjected to mechanical treatment only (from a process that treats wastes which are listed in this table only).
<b>20</b>	<b>Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard packaging – excludes laminates such as Tetrapaks and must conform to BS EN 13432 and not allowed if any non-biodegradable coating or preserving substance is present.
20 01 08	biodegradable kitchen and canteen waste
20 01 25	edible oil and fat
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 01	biodegradable waste
<b>20 03</b>	<b>other municipal wastes</b>
20 03 01	mixed municipal waste – only separately collected biodegradable wastes of types listed within this table, Table S2.2

<b>Table S2.6 Permitted waste types and quantities for anaerobic digestion</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 65,345 tonnes</b>
<b>Exclusions</b>	<p>Wastes having any of the following characteristics shall not be accepted:</p> <ul style="list-style-type: none"> <li>• separately collected loads of plastic unless the whole load is certified compostable to BS EN13432</li> <li>• co-mingled green and food waste containing more than 5% w/w plastic, unless the plastic is certified compostable to BS EN 13432</li> <li>• food wastes containing more than 5% w/w plastic unless there is sufficient technology to remove non-compostable plastic prior to treatment from package food waste to a processing limit of 1% w/w or decreasing year on year by 2025.</li> <li>• wastes containing wood-preserving agents or other biocides and post-consumer wood</li> <li>• wastes containing persistent organic pollutants</li> <li>• wastes containing Japanese Knotweed or other invasive plant species listed in the Alien Invasive Species Regulations 2014</li> <li>• manures, slurries and spoiled bedding and straw from farms where animals have notifiable diseases as stipulated in the Animal By-Products (Enforcement) (England) Regulations 2013.</li> </ul>
<b>Waste code</b>	<b>Description</b>
20 03 02	waste from markets – allowed only if source segregated biodegradable fractions e.g. plant material, fruit and vegetables

<b>Table S2.7 Permitted waste types and quantities for the effluent treatment plant</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 76,285 tonnes</b>
<b>Exclusions</b>	--
<b>Waste code</b>	<b>Description</b>
<b>19</b>	<b>Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use</b>
<b>19 06</b>	<b>Wastes from anaerobic treatment of waste</b>
19 06 03	Liquor from anaerobic treatment of municipal waste
19 06 99	Compost leachate

## 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
<b>Existing medium combustion plant which are engines fuelled on biogas</b>						
EP09 [Point EP09 on site plan in drawing SK-EXT-9140, issue A07, dated 21/04/15.]	CHP engine 1 stack (2.8 MWth) [note 1]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	500 mg/m <sup>3</sup>	Average over sample period	Annual	BS EN 14792
		Sulphur dioxide	350 mg/m <sup>3</sup> [note 3]			BS EN 14791 or CEN TS 17021 or by calculation based on fuel sulphur
			162 mg/m <sup>3</sup> [note 4]			
		Carbon monoxide	1,400 mg/m <sup>3</sup>			BS EN 15058
Total VOCs	No limit set	BS EN 12619				
EP10 [Point EP10 on site plan in drawing SK-EXT-9140, issue A07, dated 21/04/15.]	CHP engine 2 stack (2.8 MWth) [note 1]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	500 mg/m <sup>3</sup>	Average over sample period	Annual	BS EN 14792
		Sulphur dioxide	350 mg/m <sup>3</sup> [note 3]			BS EN 14791 or CEN TS 17021 or by calculation based on fuel sulphur
			162 mg/m <sup>3</sup> [note 4]			
		Carbon monoxide	1,400 mg/m <sup>3</sup>			BS EN 15058
Total VOCs	No limit set	BS EN 12619				

Table S3.1 Point source emissions to air – emission limits and monitoring requirements							
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method	
<b>Existing medium combustion plant other than engines fuelled on biogas (1 MW to less than 5 MW)</b>							
EP06 [Point EP06 on site plan in drawing SK-EXT-9140, issue A07, dated 21/04/15.]	Boiler 1 stack (1.24 MWth) [burning biogas]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	500 mg/m <sup>3</sup> [Note 2] [Note 3]	Average over sample period	Annual	BS EN 14792	
			250 mg/m <sup>3</sup> [Note 1] [Note 4]				
		Sulphur dioxide	350 mg/m <sup>3</sup> [Note 2] [Note 3]				or CEN TS 17021 or by calculation based on fuel sulphur
			200 mg/m <sup>3</sup> [Note 1] [Note 4]				
		Total Volatile Organic Compounds (VOCs)	1,000 mg/m <sup>3</sup> [Note 2]				
Carbon monoxide	1,400 mg/m <sup>3</sup> [Note 2]	BS EN 15058					
EP07 [Point EP07 on site plan in drawing SK-EXT-9140, issue A07, dated 21/04/15.]	Boiler 2 stack (1.24 MWth) [burning biogas]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	500 mg/m <sup>3</sup> [Note 2] [Note 3]	Average over sample period	Annual	BS EN 14792	
			250 mg/m <sup>3</sup> [Note 1] [Note 4]				
		Sulphur dioxide	350 mg/m <sup>3</sup> [Note 2] [Note 3]				BS EN 14791 or CEN TS 17021

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
			200 mg/m <sup>3</sup> [Note 1] [Note 4]			or by calculation based on fuel sulphur
		Total Volatile Organic Compounds (VOCs)	1,000 mg/m <sup>3</sup> [Note 2]			BS EN 12619:2013
		Carbon monoxide	1,400 mg/m <sup>3</sup> [Note 2]			BS EN 15058
EP12 [Point EP12 on site plan in drawing SK-EXT-9140, issue A07, dated 21/04/15.]	Emergency flare stack [note 5]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	150 mg/m <sup>3</sup>	Average over sample period	[note 6]	BS EN 14792
		Carbon monoxide	50 mg/m <sup>3</sup>			BS EN 15058
		Total VOCs	10 mg/m <sup>3</sup>			BS EN 12619
EP01 [Point EP01 on site plan in drawing SK-EXT-9140, issue A07, dated 21/04/15.]	Bag filter stack	Dust	5 mg/m <sup>3</sup>	Average over sample period	Once every 6 months	EN 13284-1
EP02 [Point EP02 on site plan in drawing SK-EXT-9140, issue A07, dated 21/04/15.]	Barrier 1 biofilter emission stack	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 <sup>3</sup>	Average over sample period	Once every 6 months	EN ISO 21877
		Odour concentration	No limit set	--	Once every 3 months	BS EN 13725
EP03	Barrier 2 biofilter emission stack	Hydrogen sulphide	No limit set	Average over	Once every 6 months	CEN TS 13649 for sampling

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
[Point EP03 on site plan in drawing SK-EXT-9140, issue A07, dated 21/04/15.]				sample period		NIOSH 6013 for analysis
		Ammonia	20 mg/m <sup>3</sup>	Average over sample period	Once every 6 months	EN ISO 21877
		Odour concentration	No limit set	--	Once every 3 months	BS EN 13725
EP04 [Point EP04 on site plan in drawing SK-EXT-9140, issue A07, dated 21/04/15.]	Carbon filter stack 1	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 <sup>3</sup>	Average over sample period	Once every 6 months	EN ISO 21877
		Odour concentration	No limit set	--	Once every 3 months	BS EN 13725
		Dust	5 mg/m <sup>3</sup>	Average over sample period	Once every 6 months	EN 13284-1
		TVOC	40 mg/m <sup>3</sup>	Average over sample period	Once every 6 months	BS EN 12619
EP05 [Point EP05 on site plan in drawing SK-EXT-9140, issue A07, dated 21/04/15.]	Carbon filter stack 2	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 <sup>3</sup>	Average over sample period	Once every 6 months	EN ISO 21877
		Odour concentration	No limit set	--	Once every 3 months	BS EN 13725
		Dust	5 mg/m <sup>3</sup>	Average over sample period	Once every 6 months	EN 13284-1

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

<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
		TVOC	40 mg/m <sup>3</sup>	Average over sample period	Once every 6 months	BS EN 12619
EP08 [Point EP08 on site plan in drawing SK-EXT-9140, issue A07, dated 21/04/15.]	Bioscrubber and carbon polishing stack 1	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 <sup>3</sup>	Average over sample period	Once every 6 months	EN ISO 21877
		Odour concentration	No limit set	--	Once every 3 months	BS EN 13725
		Dust	5 mg/m <sup>3</sup>	Average over sample period	Once every 6 months	EN 13284-1
		TVOC	40 mg/m <sup>3</sup>	Average over sample period	Once every 6 months	BS EN 12619
EP11 [Point EP11 on site plan in drawing SK-EXT-9140, issue A07, dated 21/04/15.]	Bioscrubber and carbon polishing stack 2	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 <sup>3</sup>	Average over sample period	Once every 6 months	EN ISO 21877
		Odour concentration	No limit set	--	Once every 3 months	BS EN 13725
		Dust	5 mg/m <sup>3</sup>	Average over sample period	Once every 6 months	EN 13284-1
		TVOC	40 mg/m <sup>3</sup>	Average over sample period	Once every 6 months	BS EN 12619
Pressure relief valves	Digesters and gas storage tanks	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	--

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
<p><b>Note 1</b> – These emission limits are based on normal operating conditions and load - temperature 0°C (273 K); pressure 101.3 kPa and oxygen 5% (for gas engines burning biogas) and oxygen 3% (for medium combustion plants other than engines and gas turbines burning biogas).</p> <p><b>Note 2</b> - These emission limits are based on normal operating conditions and load - temperature: 0°C (273 K); pressure: 101.3 kPa and oxygen 5%.</p> <p><b>Note 3</b> – This emission limit applies until 31 December 2029, unless the unit is replaced.</p> <p><b>Note 4</b> – This emission limit applies from 1 January 2030, unless otherwise advised by the Environment Agency.</p> <p><b>Note 5</b> – These emission limits are based on normal operating conditions and load - temperature 0°C (273K); pressure 101.3 kPa and oxygen 3%.</p> <p><b>Note 6</b> – 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.</p>						

<b>Table S3.2 Point source emissions to water (other than sewer) and land – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. unit)</b>	<b>Reference Period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
W1 on site plan – outfall from attenuation pond to off-site reed bed	Site surface water	Oil or grease	No visible oil or grease	--	Weekly	Visual assessment
		Total organic carbon (TOC) [Note 1 & 2]	60 mg/l	Spot sample or flow-proportional composite sample	Once every month	BS EN 1484
		Chemical oxygen demand (COD) [Note 1 & 2]	180 mg/l	Spot sample or flow-proportional composite sample	Once every month	BS EN ISO 15705
		Total nitrogen [Note 2]	25 mg/l	Spot sample or flow-proportional composite sample	Once every month	BS EN ISO 11905-1 or BS EN 12260
		Total phosphorus [Note 2]	2 mg/l	Spot sample or flow-proportional composite sample	Once every month	EN ISO 5681-1 and -2 or EN ISO 6878 or EN ISO 11885
		Total suspended solids [Note 2]	60 mg/l	Spot sample or flow-proportional composite sample	Once every month	BS EN 872
		Arsenic [Note 2]	0.05 mg/l	Spot sample or flow-	Once every month	BS EN ISO 11885 or



<b>Table S3.2 Point source emissions to water (other than sewer) and land – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. unit)</b>	<b>Reference Period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
		Cadmium [Note 2]	0.05 mg/l	proportional composite sample		BS EN ISO 17294-2 or BS EN ISO 15586
		Chromium [Note 2]	0.15 mg/l			
		Copper [Note 2]	0.5 mg/l			
		Nickel [Note 2]	0.5 mg/l			
		Lead [Note 2]	0.1 mg/l			
		Zinc [Note 2]	1 mg/l			
		Mercury [Note 2]	5 µg/l			
<p>Note 1 – Either TOC or COD can be monitored. TOC is the preferred option, because its monitoring does not rely on the use of very toxic compounds.</p> <p>Note 2 - The monitoring only applies when the substance concerned is identified as relevant in the waste water inventory.</p>						

<b>Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. Unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
S1 on site plan in schedule 7 - emission to Yorkshire Water South Elmsall Sewage Treatment Works	Treated effluent from site ETP	Arsenic [Note 1]	0.05 mg/l	Spot sample or flow-proportional composite sample	Once every month	BS EN ISO 11885 or BS EN ISO 17294-2 or BS EN ISO 15586
		Cadmium [Note 1]	0.05 mg/l			
		Chromium [Note 1]	0.15 mg/l			
		Copper [Note 1]	0.5 mg/l			
		Nickel [Note 1]	0.5 mg/l			
		Lead [Note 1]	0.1 mg/l			
		Zinc [Note 1]	1 mg/l			
		Mercury [Note 1]	5 µg/l			
<p>Note 1 – The monitoring only applies when the substance concerned is identified as relevant in the waste water inventory.</p>						

<b>Table S3.4 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Digester feed (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			
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			
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 <sub>2</sub>	Continuous	None specified	Gas monitors to be calibrated every 6 months or in accordance with the manufacturer's recommendations.
	O <sub>2</sub>	Continuous	None specified	
	Hydrogen sulphide	Daily	None specified	
	Pressure	Continuous	None specified	
Digesters and storage tanks	Integrity checks	Weekly	Visual assessment	--
Digesters	Agitation /mixing	Continuous	Systems controls. Yearly lithium or thermal imaging	Records maintained in daily operational records.
	Tank capacity and sediment assessment	Once a year		In accordance with design specification and tank integrity checks.
Waste reception building or area; Digesters and storage tanks	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary.

<b>Table S3.4 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Diffuse emissions from all sources identified in the Leak Detection and Repair (LDAR) programme	VOCs including methane	Every 6 months or otherwise agreed in accordance with the LDAR programme	In accordance with the LDAR programme	Leak detection and repair (LDAR) programme in accordance with permit condition 3.2.4.
CHP engine stacks	VOCs including methane	Annually	BS EN 12619	Total annual VOCs emissions from the CHP engines to be calculated and submitted to the Environment Agency.
	Exhaust gas temperature		Traceable to National Standards	--
	Exhaust gas pressure		Traceable to National Standards	--
	Exhaust gas water vapour content		BS EN 14790-1	Unless gas is dried before analysis of emissions.
	Exhaust gas oxygen		BS EN 14789	--
	Exhaust gas flow		BS EN 16911-1	--
Meteorological conditions	Wind speed, air temperature, wind direction	Continuous	Method as specified in management system	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.

<b>Table S3.4 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Pressure relief valves	Biogas release and operational events	Daily inspection	Recorded duration and frequency.	Operational record including date, time duration of pressure relief events and calculated annual mass release.  Pressure relief valves to be re-seated after release.
Storage tanks	Volume	Daily	Visual or flow metre measurement	750 mm freeboard must be maintained for storage lagoons.
<b>In vessel composting operations</b>				
Stock piles prior to composting including screened and shredded material	Temperature	Daily prior to processing	Temperature probe	Monitoring equipment shall be available on site and used as required to maintain aerobic conditions and ensure compliance with this permit.  Equipment shall be calibrated on a 4 monthly basis, or as agreed in writing by the Environment Agency.  Uncontrolled self-heating and decomposition must be prevented in accordance with the Accident Management Plan and/or Fire Prevention Plan.  Process shall be controlled in
	Moisture	Daily prior to processing	Squeeze test, or drying oven in accordance with BS EN 13040	
	C:N Total Organic Carbon and Total Kjeldahl Nitrogen	As agreed in the Environmental Management System	Total Organic Carbon using recognised industry method  Total Kjeldahl Nitrogen in accordance with BS EN 13654-1	

<b>Table S3.4 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
				<p>accordance with permit condition 3.3 and the Odour Management Plan.</p> <p>Sampling of waste shall be in accordance with EN14899.</p> <p>Anaerobic conditions shall be prevented.</p>
	Fly infestation or pupa formation	<p>Daily – for stock piles in storage prior to preparation and stock piles in sanitisation stage</p> <p>Weekly – for stock piles in stabilisation stage</p>	Visual inspection	Records of fly count must be maintained as necessary and infested waste should be rejected in accordance waste acceptance procedures and in accordance with permit condition 3.6.
Representative internal core for each composting batch during sanitisation and stabilisation stage	Temperature	Daily Continuous during sanitisation stage for IVC treating animal by-products	<p>Temperature probe</p> <p>Temperature probe shall record core waste temperature and probe placement must be sufficient to record temperature uniformly.</p>	<p>Monitoring equipment shall be available on site and used as required to maintain aerobic conditions and ensure compliance with this permit.</p> <p>Equipment shall be calibrated on a 4 monthly basis, or as agreed in writing by the Environment Agency.</p>
	Moisture	Daily during sanitisation and stabilisation stage	Squeeze test, or drying oven in accordance with BS EN 13040	
	C:N Total Organic Carbon and Total Kjeldahl Nitrogen	As agreed in the Environmental Management System	Total Organic Carbon using recognised industry method	Process shall be controlled in accordance with permit condition 3.3 and the Odour Management Plan.

<b>Table S3.4 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
			Total Kjeldahl Nitrogen in accordance with BS EN 13654-1	Sampling of waste shall be in accordance with EN14899.  Anaerobic conditions shall be prevented.
Representative internal core for each composting batch during further maturation stage	Temperature	Once per week	Temperature probe  Temperature probe shall record core waste temperature and probe placement must be sufficient to record temperature uniformly	Process shall be controlled in accordance with permit condition 3.3 and the Odour Management Plan.
	Moisture	Once per week	Squeeze test, or drying oven in accordance with BS EN 13040	
Internal core for oversize storage piles	Temperature	Once per week	Temperature probe  As specified in the Environmental Management System	Uncontrolled self-heating and decomposition must be prevented in accordance permit condition 3.7, the Fire Prevention Plan and/or Accident Management Plan.
Leachate and dirty water storage capacity	Level	At least daily	Visual or capacity measurement	750 mm freeboard must be maintained for storage lagoons.
Waste reception building; Storage tank(s); Maturation area	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary
Storage tank(s)	Integrity checks	Weekly	Visual assessment	--

**Table S3.4 Process monitoring requirements**

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
<b>Odour abatement plant</b>				
Closed biofilters	Gas temperature – inlet and outlet	Daily	Temperature probe / Traceable to national standards	Odour abatement plant shall be regularly checked and maintained to ensure appropriate temperature and moisture content.
	Biofilter media moisture	Daily	Moisture meter or recognised industry method	
	Thatching /compaction	Weekly	Back pressure	Odour abatement plant shall be managed in accordance with permit condition 3.3, the odour management plan and manufacturer's recommendations.
	Gas flow rate – inlet and outlet	Continuous	Gas flow meter / EN 16911-1 and MID for EN 16911-1	
	pH (biofilter drainage effluent)	Daily	pH metre	
	Efficiency assessment	Annual	Media health, air-flow distribution and emission removal efficiency (BS EN 13725 for odour removal)	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 IC5 as approved in writing by the Environment Agency.  Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
	Ammonia – inlet	Every 6 months or as agreed in writing by the Environment Agency.	EN ISO 21877	Action levels to be agreed on completion of IC5 as approved in writing by the Environment Agency.

<b>Table S3.4 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
				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 3 months or as agreed in writing by the Environment Agency.	BS EN 13725	Action levels to be agreed on completion of IC5 as approved in writing by the Environment Agency.  Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
Scrubbers	Gas temperature – inlet and outlet	Continuous	Temperature probe / Traceable to national standards	Odour abatement plant shall be regularly checked and maintained to ensure appropriate temperature and moisture content.
	Gas flow rate – inlet and outlet	Continuous	Gas flow meter / EN 16911-1 and MID for EN 16911-1	
	Moisture content or humidity – inlet and outlet (for dry scrubbers only)	Daily	Moisture meter	Odour abatement plant shall be managed in accordance with permit condition 3.3, the odour management plan and manufacturer's recommendations.
	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)	Equipment shall be calibrated on a 4 monthly basis, or as agreed in writing by the Environment Agency.



<b>Table S3.4 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
	pH scrubber solution (pre-abatement)	Continuous	pH meter	
	pH scrubber solution (post-abatement)	Continuous	pH meter	
	Hydrogen sulphide – inlet and outlet gas stream	Every 6 months or as agreed in writing by the Environment Agency.	CEN TS 13649 for sampling  NIOSH 6013 for analysis	Action levels to be agreed on completion of IC5 as approved in writing by the Environment Agency.  Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
	Ammonia – inlet	Every 6 months or as agreed in writing by the Environment Agency.	EN ISO 21877	Action levels to be agreed on completion of IC5 as approved in writing by the Environment Agency.  Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.
Carbon filters	Carbon bed temperature – inlet and outlet	Continuous	Temperature probe	Odour abatement plant shall be managed in accordance with permit condition 3.3, the odour management plan and manufacturer's recommendations.
	Gas flow rate – inlet and outlet	Continuous	Gas flow meter	
	Moisture or humidity	Daily	Moisture meter	
	Back pressure	Weekly	Recognised industry method	
	Efficiency assessment	Annual	Emission removal efficiency (BS EN 13725 for odour removal)	Carbon filters to be replaced in accordance with

<b>Table S3.4 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
				<p>manufacturer's recommendations.</p> <p>Equipment shall be calibrated on a 4 monthly basis, or as agreed in writing by the Environment Agency.</p>
	Hydrogen sulphide – inlet and outlet gas stream	Every 6 months or as agreed in writing by the Environment Agency.	<p>CEN TS 13649 for sampling</p> <p>NIOSH 6013 for analysis</p>	<p>Action levels to be agreed on completion of IC5 as approved in writing by the Environment Agency.</p> <p>Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.</p>
	Ammonia – inlet	Every 6 months or as agreed in writing by the Environment Agency.	EN ISO 21877	<p>Action levels to be agreed on completion of IC5 as approved in writing by the Environment Agency.</p> <p>Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.</p>
	Odour concentration – inlet and outlet gas stream	Every 3 months or as agreed in writing by the Environment Agency.	BS EN 13725	Action levels to be agreed on completion of IC5 as approved in writing by the Environment Agency.

<b>Table S3.4 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
				Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.

## Schedule 4 – Reporting

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

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Emissions to air from CHP engines, boilers and flare Parameters as required by condition 3.5.1.	EP06, EP07, EP09, EP10 and EP12	Annually, unless otherwise agreed by the Environment Agency.	1 January
Emissions to air from abatement plant Parameters as required by condition 3.5.1.	EP01, EP02, EP03, EP04, EP05, EP08 and EP11	Every 6 months, unless otherwise agreed by the Environment Agency.	1 January, 1 July
Emissions to water and land Parameters as required by condition 3.5.1	W1	Annually, unless otherwise agreed by the Environment Agency.	1 January
Emissions to sewer Parameters as required by condition 3.5.1	S1	Annually, unless otherwise agreed by the Environment Agency.	1 January
Process monitoring Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.4	Annually, unless otherwise agreed by the Environment Agency.	1 January
Total annual VOCs emissions from gas engines (calculated)	As specified in schedule 3 table S3.4	Annually, unless otherwise agreed by the Environment Agency.	1 January
Biofilter efficiency Parameters as required by condition 4.2.6	Biofilters	Annually, unless otherwise agreed by the Environment Agency.	1 January

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

<b>Table S4.2 Annual production/treatment</b>	
<b>Parameter</b>	<b>Units</b>
Processed compost	tonnes

<b>Table S4.3 Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Water usage	Annually	tonnes or m <sup>3</sup>
Energy usage	Annually	MWh
Raw material usage	Annually	tonnes or m <sup>3</sup>
Emergency flare operation	Annually	hours
Electricity exported	Annually	MWh
CHP engine usage	Annually	hours
CHP engine efficiency	Annually	%
Boiler usage	Annually	hours
Effluent to sewer	Annually	kilograms or litres or m <sup>3</sup>

<b>Table S4.4 Reporting forms</b>		
<b>Media/parameter</b>	<b>Reporting format</b>	<b>Date of form</b>
Air	Form air 1 or other form as agreed in writing by the Environment Agency	12/11/2020
Process monitoring	Form process 1 or other form as agreed in writing by the Environment Agency	12/11/2020
Water	Form water 1 or other form as agreed in writing by the Environment Agency	12/11/2020
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	12/11/2020
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	12/11/2020
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	12/11/2020
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	12/11/2020
Waste returns	E-waste Return Form or other form as agreed in writing by the Environment Agency	--

# Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

## Part A

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

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

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

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

<b>Time periods for notification following detection of a breach of a limit</b>	
<b>Parameter</b>	<b>Notification period</b>

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

## Part B – to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

\* authorised to sign on behalf of the operator

## Schedule 6 – Interpretation

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

“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.

“Annex I” means Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“Annex II” means Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

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

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

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

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

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

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

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

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

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

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

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



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

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

“compostable plastics” means plastics that are certified to meet the standards of EN 13432, EN 14995 or equivalent and is capable of breaking down by microbial digestion to create compost.

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

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

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

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

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

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

“emissions to land” includes emissions to groundwater.

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

“existing medium combustion plant” means an MCP which was put into operation after 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.

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

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

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

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

“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 a stage when by agitating and turning the compost, it no longer results in reheating and the monitored temperature falls to ambient without the compost being too dry or anaerobic. Phytotoxin that

are formed during the active composting phase are metabolised by microorganisms, which will result in the final material not being too harmful to plants. This usually coincides with a drop in pH toward neutral, and the conversion of ammonia into nitrates and recolonization of beneficial microorganisms. The maturation phase may need active management by turning to prevent the material becoming anaerobic.

“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.

“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.

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

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

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

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

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

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

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

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

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

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

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

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

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

“Waste Framework Directive” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

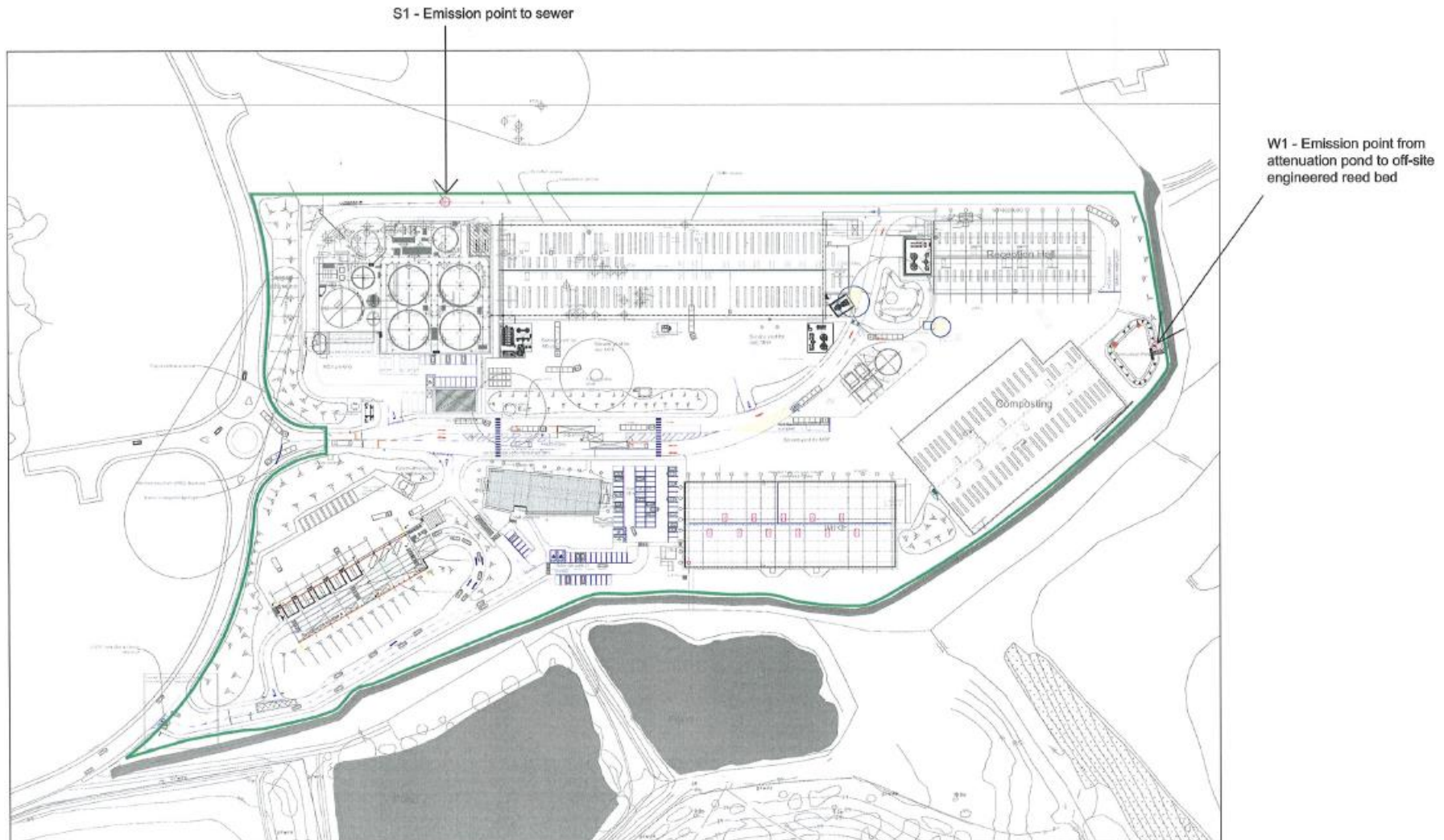
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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

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

“year” means calendar year ending 31 December.

# Schedule 7 – Site plan



END OF PERMIT