

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Southern Water Services Limited

Bexhill and Hastings Sludge Treatment Centre Bexhill Road Hastings East Sussex TN38 8FB

#### Variation application number

EPR/KP3630KV/V003

#### Permit number

EPR/KP3630KV

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## Bexhill and Hastings Sludge Treatment Centre (STC) Permit number EPR/KP3630KV

#### Introductory note

#### This introductory note does not form a part of the permit

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. The schedule of waste management activities includes the recovery of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment, but excludes activities covered by the Urban Waste Water Treatment Regulations (UWWTR). However, UK environmental regulators concluded that the biological treatment of waste sewage sludge is not an activity covered by the UWWTR and is therefore within the scope of the IED. 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. BAT applies to new waste sewage sludge treatment not covered by the UWWTR. The operations at Bexhill and Hastings STC are existing but will be brought into environmental regulation for the first time and are required to operate using BAT.

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

The variation is to surrender the activities in the existing permit associated with the sludge dryer, and to add a sludge treatment (anaerobic digestion (AD)) activity as the primary permitted installation activity. No land is being surrendered as a result of the surrender of the sludge dryer activity; the permit boundary is increasing to include the new authorised activity. The authorised scheduled activity is a S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment under the above regulations. In addition, there are directly associated supporting activities (DAAs) to the primary activity including waste storage, pre and post treatment, raw material storage, digestate storage, gas storage, combustion and air abatement.

#### Brief description of the process

Bexhill and Hastings Sludge Treatment Centre (STC) is situated to the west of Hastings, centred at approximately National Grid Reference TQ 76590 09381. It adjoins the Wastewater Treatment Works (WwTW) which serves Bexhill, Hastings, St Leonards on Sea and nearby villages. The WwTW is not part of the permit boundary.

Bexhill and Hastings STC accepts indigenous primary sludge and imported sludge cake. Raw sludge cake is imported to the site from Hailsham WTW and Eastbourne WTW, as well as from other sites under emergency conditions. A maximum of eight tankers of sludge cake are imported daily into the STC in sealed containers. The cake is discharged into one feed hopper/blending tank where it is blended with Surplus Activated Sludge (SAS), and then stored in two thickened sludge tanks. Indigenous primary sludge is pumped via two sludge screens to two combined sludge storage tanks which are operated in fill and draw mode.

The sludge is fed by feed pumps to three gravity belt thickeners (GBT's), operating as duty/standby units (automatically operated 24 hours a day, 7 days a week). The liquor from the GBTs is directed to the WwTW at emission point S5 and sampled at monitoring point M5.

Thickened sludge is then stored in two thickened sludge storage tanks prior to be being fed to the anaerobic digesters. There are three primary anaerobic digesters operating between 33 to 38°C. The anaerobic digestors have a 539 m³/day treatment capacity. The site accepts up to 1,227,082 wet tonnes per annum. The biogas produced from the digestion process is stored in a double skinned gas bag. Biogas is fed to a 1.84 MWth thermal input combined heat and power (CHP) engine, where it used to generate heat and electricity for the site's operations e.g. to maintain temperature of digesters. There is also a 1.48Mth thermal input dual fuel auxiliary boiler and a flare to burn excess biogas in an emergency. The existing CHP and boiler fall within the scope of the Medium Combustion Plant Directive (MCPD) since the thermal rated input of the units are greater than 1MWth each. However, they won't be required to meet MCPD requirements until 2030 because they are existing medium combustion plants below 5MWth.

Digested sludge is stored in two post digestions sludge tanks prior to being dewatered by two centrifuges (one standby, one duty). Centrate from the centrifuges is returned to the WwTW at emission point S1 and sampled at monitoring point M1. Lime solution is dosed into the feed line of the centrifuges by a lime dosing rig consisting of one lime storage tank and two peristaltic dosing pumps (duty and standby). Limed cake drops into a 100 m³ sludge cake silo before being transported offsite for recycling to agriculture.

The site has an odour control unit (OCU) comprising of a two-staged chemical scrubbing plant. The plant treats foul air via chemical dosing prior to it being dispersed to the atmosphere by a 18m stack (emission point A8). The OCU treats extracted odorous air from the main control and process building, the screens, grit and grease removal process, sludge reception area, sludge thickeners, sludge holding tanks and centrifuges.

The main emissions to air are from the CHP, boiler, emergency flare and pressure relief valves on the gas system. The emission stack (emission point A1) has been removed as this served the sludge dryer operation and the activity has ceased. Waste water/liquors from site operations is directed to the adjoining WwTW to be treated. This is regarded as an indirect discharge to the English Channel (via a long sea outfall).

The site is surrounded by wooded areas to the west and north. The closest human receptors are approximately 220m away to the south/southwest. Habitats sites within screening distance are Pevensey Levels, Hastings Cliffs Special Areas of Conservation (SACs); Dungeness, Romney Marsh and Rye Bay Special Protection Area (SPA); Pevensey Levels (Ramsar); Beachy Head East Marine Conservation Zone (MCZ); Combe Haven Site of Special Scientific Interest (SSSI) and several local designations.

The site operates under an Environmental Management System (EMS) accredited to ISO14001:2015.

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

Status log of the permit			
Description	Date	Comments	
Application KP3630KV	Duly made 01/07/2009	Application for burning biogas from a sludge dryer.	
Additional information received	03/12/2009 28/06/2010 08/07/2010		
Permit EPR/KP3630KV	30/11/2010	Permit issued to Southern Water Services Limited.	
Agency variation determined EPR/KP3630KV/V002	28/03/2013	Agency variation to implement changes introduced by IED.	

Status log of the permit			
Description	Date	Comments	
Application EPR/KP3630KV/V003	Duly made 30/08/2024	Application to surrender a sludge dryer activity and add an anaerobic digestion facility with combustion of biogas at a waste sewage sludge treatment site.	
Variation and consolidation determined EPR/KP3630KV/V003	14/02/2025	Variation and consolidation issued to Southern Water Services Limited.	

End of introductory note

#### **Permit**

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

The Environment Agency hereby authorises, under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

#### **Permit number**

EPR/KP3630KV

#### Issued to

Southern Water Services Limited ("the operator"),

whose registered office is

Southern House Yeoman Road Worthing West Sussex BN13 3NX

company registration number 02366670

to operate a regulated facility at

Bexhill and Hastings STC Freshfields Bexhill Road St. Leonards-on-Sea TN38 8FB

to the extent set out in the schedules.

The notice shall take effect from 14/02/2025

Name	Date
Maxine Evans	17/02/2025

Authorised on behalf of the Environment Agency

#### Schedule 1

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

#### Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

#### **Permit**

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

#### Permit number

#### EPR/KP3630KV

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Southern Water Services Limited ("the operator"),

whose registered office is

Southern House Yeoman Road Worthing West Sussex BN13 3NX

company registration number 02366670

to operate an installation at

Bexhill and Hastings STC Freshfields Off Bexhill Road St. Leonards-on-Sea East Sussex TN38 8FB

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

Name	Date
Maxine Evans	17/02/2025

Authorised on behalf of the Environment Agency

#### **Conditions**

#### 1 Management

#### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
  - in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme.

#### 1.2 Energy efficiency

- 1.2.1 The operator shall:
  - (a) take appropriate measures to ensure that energy is used efficiently in the activities;
  - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) take any further appropriate measures identified by a review.

#### 1.3 Efficient use of raw materials

- 1.3.1 The operator shall:
  - (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities:
  - (b) maintain records of raw materials and water used in the activities;
  - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
  - (d) take any further appropriate measures identified by a review.

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

- 1.4.1 The operator shall take appropriate measures to ensure that:
  - (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
  - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
  - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

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

#### 2 Operations

#### 2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").
- 2.1.2 The activities shall be undertaken in accordance with best available techniques.
- 2.1.3 All process plant and equipment shall be commissioned, operated and maintained and shall be fully documented and recorded in accordance with the manufacturer's recommendations.
- 2.1.4 Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

#### 2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown 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 table S2.2; and
  - (b) it conforms to the description in the documentation supplied by the producer and holder.
  - (c) the facility has sufficient free capacity to store and treat the waste.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
  - (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.
- 2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

- 2.3.7 Waste pre-acceptance and acceptance procedures shall be undertaken in accordance with best available techniques.
- 2.3.8 For the following activities referenced in schedule 1, table S1.1 (AR4):
  - (a) each MCP must be operated in accordance with the manufacturer's instructions and records must be made and retained to demonstrate this.
  - (b) the operator must keep periods of start-up and shut-down of the combustion plant as short as possible.
  - (c) there shall be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993.

#### 2.4 Improvement programme

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

#### 3 Emissions and monitoring

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

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

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

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour but including ammonia) 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 Subject to condition 3.2.4, below, all liquids in containers, whose emission to water or land could cause pollution, shall be provided with adequate secondary containment, unless other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container have been agreed in writing with the Environment Agency.
- 3.2.4 Condition 3.2.3, above, shall apply unless the operator strictly complies in full with IC1 below.

- 3.2.5 Subject to condition 3.2.6, below, the operator shall use buffer storage to store waste water and digestate to prevent waste water or digestate being discharged off site during the receiving waste water treatment works storm overflow operating, unless other appropriate measures to prevent or where that is not practicable, to minimise, emissions during waste water treatment works storm overflow operation, have been agreed in writing with the Environment Agency.
- 3.2.6 Condition 3.2.5, above, shall apply unless the operator strictly complies in full with IC3 below.
- 3.2.7 The operator shall implement a leak detection and repair (LDAR) programme to detect and mitigate the release of volatile organic compounds, including methane from diffuse sources.

#### 3.3 Odour

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

#### 3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
  - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### 3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in tables S3.1 and, S3.2;
  - (b) process monitoring specified in tables S3.3 and S3.4;
  - (c) bioaerosols monitoring specified in table \$3.5
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2, S3.3, S3.4, S3.5 and S3.6 unless otherwise agreed in writing by the Environment Agency.
- 3.5.5 For the following activities referenced in Schedule 1 Table S1.1 (AR4):

- (a) For existing MCP Monitoring measurements shall be carried out before the relevant compliance date or within four months of the issue date of the permit whichever is the later.
- 3.5.6 Monitoring of MCP shall not take place during periods of start up or shut down.

#### 3.6 Bioaerosols

- 3.6.1 The operator shall take all appropriate measures, to prevent or where that is not practicable to minimise the release of bioaerosols. Emissions of bioaerosols from the operational activities shall not exceed the emission action levels specified in table S3.5
- 3.6.2 The operator shall where the emission action levels are exceeded:
  - (a) notify the Environment Agency and investigate and take remedial action;
  - (b) submit to the Environment Agency for approval within the period specified, a bioaerosols management plan which identifies and minimises the risks of pollution from bioaerosols; and
  - (c) implement the bioaerosols management plan from the date of approval and revise the plan periodically, unless otherwise agreed in writing by the Environment Agency.

#### 3.7 Pests

- 3.7.1 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.
- 3.7.2 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.

#### 3.8 Fire prevention

- 3.8.1 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.
- 3.8.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
  - (b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.8.3 The operator shall undertake a DSEAR assessment and maintain an accident management plan.

#### 4 Information

#### 4.1 Records

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

#### 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
  - (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
  - (b) the annual production/treatment data set out in schedule 4 table S4.2; and
  - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
  - (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.
- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

- 4.2.6 The operator shall keep records of non-waste materials leaving the site, including the type of material, the batch number, the date of export off-site and the tonnage exported on that date. These records shall be maintained for at least 2 years.
- 4.2.7 The operator shall submit an annual report detailing the efficiency of removal of non-digestible materials from feedstock prior to processing and the level of contamination in the final recovered digestate.

#### 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 re-occurrence of the issue.
- 4.3.4 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.5 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

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

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

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

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.6 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
  - (a) the Environment Agency shall be notified at least 14 days before making the change; and
  - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.7 The Environment Agency shall be given at least 14 days' notice before implementation of any part of the site closure plan.
- 4.3.8 The operator shall notify the Environment Agency as soon as is practicable, in writing of any change of medium combustion plant.

#### 4.4 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 ac	ctivities		
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
AR1	S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment	R3: Recycling/reclamation of organic substances which are not used as solvents	From receipt of waste through to digestion and recovery of by-products (waste treated by anaerobic digestion).  Anaerobic digestion of waste in three tanks followed by burning of biogas produced from the process. Anaerobic digestion shall be limited to 539 m³/day.  Waste types suitable for acceptance are limited to those specified in Table S2.2.
Directly Asso	ociated Activity		
AR2	Storage of waste pending recovery or disposal	R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced)	Undertaken in relation to Activity AR1.  From the receipt of permitted waste to pretreatment and despatch for anaerobic digestion on site.  Storage of residual wastes from pretreatment to despatch off-site for recovery.  Storage of waste in enclosed equipment and and tanks fitted with appropriate odour abatement and on an impermeable surface with a sealed drainage system.  Waste types suitable for acceptance are limited to those specified in Table S2.2.
AR3	Physical treatment for the purpose of recycling	R3: Recycling/reclamation of organic substances which are not used as solvents	Undertaken in relation to Activity AR1.  From the receipt of waste to despatch for anaerobic digestion or despatch off site for recovery.  Dilution of incoming wastes using final waste waters from the wastewater treatment works to aid pre-treatment and digestion only.  Pre-treatment of waste in enclosed equipment and tanks fitted with appropriate odour abatement and on an impermeable

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
			surface with a sealed drainage system, including shredding, sorting, screening, compaction, baling, mixing and maceration.
			Post-treatment of digestate in enclosed equipment and tanks fitted with appropriate odour abatement and on an impermeable surface with a sealed drainage system, including separation, screening to remove contraries, centrifuge or pressing and addition of thickening agents (polymers) or drying for use as a fertiliser or soil conditioner (drying for the purpose of use as a fuel is not permitted).
			Gas cleaning by biological or physical (carbon filtration) or chemical scrubbing.
			Waste types suitable for acceptance are limited to those specified in Table S2.2.
AR4	Steam and electrical power supply	R1: Use principally as a fuel to generate	Undertaken in relation to Activity AR1.
	power suppry	energy	From the receipt of biogas produced at the on-site anaerobic digestion process to combustion with the release of combustion gases.
			Combustion of biogas in one combined heat and power (CHP) engine with an aggregated thermal input of 1.84 MWth.
			Combustion of biogas and natural gas in one auxiliary boiler with an aggregated thermal input of 1.48 MWth.
AR5	Emergency flare operation	D10: Incineration on land	Undertaken in relation to Activity AR1.
			From the receipt of biogas produced at the on-site anaerobic digestion process to incineration with the release of combustion gases.
			There shall be no venting or flaring of gas for disposal.
			Use of one auxiliary flare required only during periods of breakdown or maintenance of the CHP engine, and/or auxiliary boiler.

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
AR6	Raw material storage	Storage of raw materials including lubrication oil, antifreeze, propane, ferric chloride, activated carbon, diesel.	From the receipt of raw materials to despatch for use within the facility.
AR7	Gas storage	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Undertaken in relation to Activity AR1.  Storage of biogas produced from on-site anaerobic digestion of permitted waste in one gas bag or roof space of digesters.  From the receipt of biogas produced at the on-site anaerobic digestion process to despatch for use within the facility.  Emissions of unburnt biogas shall be minimised.
AR8	Digestate storage	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Undertaken in relation to Activity AR1.  From the receipt of processed digestate produced from the on-site anaerobic digestion process to despatch for use offsite.  Storage of processed liquid digestate in two post digestion sludge tanks.  Storage of processed solid digestate in one cake storage silo and on an impermeable surface with sealed drainage system.
AR9	Surface water collection and storage	Collection and storage of uncontaminated roof and site surface water	From the collection of uncontaminated roof and site surface water from non-operational areas only to re-use within the facility or discharge off-site.
AR10	Air abatement	Collection and treatment of air from the buildings or plant using abatement system – [wet chemical scrubber] prior to release to atmosphere.	From the collection of air from site processes to treatment and release of treated air to atmosphere.  Collection and treatment of air from the buildings, tanks or plant using abatement system – [1 x wet chemical scrubber]

Description	Parts	Date Received
Application	Response to section 3a – technical standards, Part C of the application form.	28/09/2021 and 12/02/2024
	Best available techniques as described in the BAT Reference Document for Waste Treatment (the BREF) and BAT conclusions.	
	Residual management plan, 790101_MSD_ResidueMP_HAS, January 2024	
	Bioaerosol risk assessment, 790101_ERA_BioRA_HAS, January 2024	
Additional information	Site condition report, 790101_MSD_SCR_HAS August 2024	30/08/2024
	ERA, Environmental Risk Assessment 790101_ERA_HAS, August 2024	
	Site layout plan, 790101_MSD_SiteLayoutPlan_HAS, August 2024	
	Accident management plan, 790101_MSD_AMP_HAS August 2024	
	LDAR, Bexhill and Hastings Leak Detection and Repair Plan, October 2023	
	Drainage plan, 790101 MSD DrainagePlan HAS, August 2024	
	Site containment report, 790101 MME IED BAH CA C 001 IED ADBA tool PO3 IED Risk Register, version 3, August 2024	
	Air Quality Assessment, 790101_AQRA_HAS August 2024	
	Odour Management Plan, 790101_ERA_OdourMP_HAS, v7, August 2024	
	Main supporting Document, 790101_MSD_Main_HAS, August 2024	
	Process flow, 790101_MSD_Schematics HAS, August 2024	
	Annual throughput, 790101_AnnualThroughput_HAS, August 2024	
	Waste acceptance, 790101_WasteAcceptance_HAS, August 2024	

Reference	Requirement	Date
Improvemen	t condition for secondary containment design	1
IC1	The operator shall submit a written 'secondary containment implementation plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the finalised designs and an implementation schedule for the identified secondary containment systems proposed in the document 790101-MMD-IED-BAH-CA-C-001-IED ADBA tool PO3 IED risk register, dated August 2024. The finalised design(s) and specifications shall be produced by appropriate competent individuals (qualified civil or structural engineer), in accordance with the risk assessment methodology detailed within CIRIA C736 (2014) guidance. The plan shall include but not be limited to the following components:	Implementation of all required and approved containment improvements must be completed by 31/03/2025.

Table S1.3 Improvement programme requirements			
Reference	Requirement	Date	
	<ul> <li>An updated BAT assessment with specific regard to BAT 19 of the Waste Treatment BREF to demonstrate how the finalised designs based on the proposed secondary containment in the document 790101-MMD-IED-BAH-CA-C-001-IED ADBA tool PO3 IED risk register, dated August 2024 meets BAT 19.</li> <li>An assessment of the suitability for providing containment when subjected to the dynamic and static loads caused by catastrophic tank failure.</li> <li>Finalised designs and specifications of the proposed secondary containment proposal completed by appropriate competent individuals.</li> <li>A program of works with timescales for the commissioning of the secondary containment systems to comply with CIRIA C736 (2014) guidance, or equivalent.</li> <li>An updated site and infrastructure plan.</li> <li>A preventative maintenance and inspection regime.</li> </ul>		
	The plan shall be implemented in accordance with the Environment Agency's prior written approval.		
Improvement	conditions for primary containment tanks		
IC2	The operator shall submit a written 'primary containment plan' and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of an inspection and program of works undertaken by an appropriately qualified engineer and shall assess the extent, design specification and condition of primary containment systems (including associated pipework) where polluting liquids and solids are being stored, treated, and/or handled.	Within 12 months of permit issue or such other date as agreed in writing with the Environment	
	<ul> <li>An assessment of the physical condition of all primary containment systems (storage and treatment vessels and associated pipework) using a Written Scheme of Examination and their suitability for providing primary containment when subjected to dynamic and static loads.</li> <li>A program of works with timescales for the implementation of individual improvement measures necessary to demonstrate that the primary containment is fit for purpose or alternative appropriate measures to ensure all polluting materials will be contained on site.</li> <li>A preventative maintenance and inspection regime.</li> </ul> The plan shall be implemented in accordance with the Environment Agency's written approval.	Agency.	
Improvement	conditions for operational storage buffer capacity	I	
IC3	The operator shall submit a written "waste water and digestate buffer storage plan" and shall obtain the Environment Agency's written approval to it. The plan shall contain the results of a review of the	31/03/2025	

Table S1.3 Imp	rovement programme requirements	
Reference	Requirement	Date
	current storage of waste water and digestate produced from site operations. The review shall propose and describe site contingency arrangements to provide appropriate storage capacity or other appropriate measures to prevent or minimise emissions of waste water or digestate being discharged off site during any occasions when the receiving wastewater treatment works is in storm overflow operating conditions.	Implementation of all required containment improvements must be completed by 31/03/2025
	The storage plan shall include but not be limited to:	
	Proposals for additional storage capacity with secondary containment within the site boundary for wastewater and/or other digestate during any occasions when the receiving wastewater treatment works is in storm overflow operating conditions.	
	Procedures to cease discharges during these conditions.	
	<ul> <li>Calculation of a reasonable contingency capacity of waste water and/or other digestate during any occasions when the receiving wastewater treatment works is in storm overflow operating conditions.</li> </ul>	
	<ul> <li>A description and design specification of the buffer storage infrastructure and secondary containment measures. The design shall be completed by an appropriately qualified engineer and secondary containment shall be designed in line with CIRIA C736.</li> </ul>	
	<ul> <li>A program of works with timescales for the implementation and construction of the buffer storage.</li> </ul>	
	A preventative maintenance and inspection regime.	
	The plan shall be implemented in accordance with the Environment Agency's prior written approval.	
-	conditions for establishing an inventory of liquid waste water dischargestion and associated activities (AR1 – AR10)	jed from
IC4a	The operator shall submit a sampling programme in relation to waste water streams and shall obtain the Environment Agency's written approval to it. The sampling programme shall be designed to fully characterise the waste waters discharged to Bexhill and Hastings wastewater treatment works (WwTW) from emission points S1, S2, S3, S4, S5, S6 and S7 in table S3.2 of this permit.  The programme shall include but not be limited to a methodology for a minimum of one 24-hour flow proportional sample a month, for each emission point, for a period of 12 months. The programme shall detail the sampling methods/standards used. Sampling methods shall be in accordance with BAT conclusion 20 of the Waste Treatment BREF. The programme shall include the National Grid Reference (NGR) of the sampling point(s) location(s).	Within 2 months of issue of this permit or such other date as agreed in writing with the Environment Agency

	provement programme requirements	Data
Reference	Requirement	Date
	The programme shall establish the characteristics of the liquid waste water streams and shall include as a minimum for each emission	
	point:	
	Average values and variability of flow, pH, temperature and	
	conductivity.	
	<ul> <li>Average concentration and load values of all relevant substances and their variability.</li> </ul>	
	Data on bioeliminability.	
	The programme shall sample for all relevant substances and must include:	
	Hydrocarbon oil index (HOI) (mg/l)	
	Free cyanide (CN-) (mg/l)	
	Adsorbable organically bound halogens (AOX) (mg/l)	
	<ul> <li>Metals and metalloids; arsenic (expressed as As), cadmium (expressed as Cd), chromium (expressed as Cr), hexavalent chromium (expressed as Cr(VI)), copper (expressed as Cu), lead (expressed as Pb), nickel (expressed as Ni), mercury (expressed as Hg), zinc (expressed as Zn) (µg/I)</li> </ul>	
	The operator shall submit the collected monitoring data in writing to the Environment Agency according to agreed reporting periods.	
	The sampling programme shall be produced in accordance with Environment Agency guidance:	
	<ul> <li>Specific substances and priority hazardous substances –         Surface water pollution risk for your environmental permit         Surface water pollution risk assessment for your environmental         permit - GOV.UK (www.gov.uk).</li> </ul>	
	Monitoring discharges to water: guidance on selecting a	
	monitoring approach Monitoring discharges to water: guidance	
	on selecting a monitoring approach - GOV.UK (www.gov.uk)	
	The monitoring programme shall be carried out and the monitoring data submitted in accordance with the Environment Agency's written approval.	
-	conditions for indirect discharges to water discharged from anaerobic ctivities (AR1 – AR10)	digestion and
IC4b	The operator shall submit a report for approval by the Environment	Within 15
	Agency, following completion of the sampling programme approved under IC4a. The report shall include but not be limited to; a summary of the sample results, a completed H1 risk assessment(s) and modelling outputs where appropriate.	months of the Environment Agency's written approval of the
	The operator shall provide conclusions on whether the waste waters discharged from S1, S2, S3, S4, S5, S6 and S7 will have any adverse impact on the receiving waters once discharged from Bexhill and	sampling programme submitted

Table S1.3 Imp	provement programme requirements	
Reference	Requirement	Date
	Hastings WwTW. An assessment shall be made against the parameters specified in the relevant environmental standards as specified within Environment Agency guidance as follows:  • Specific substances and priority hazardous substances — Surface water pollution risk for your environmental permit Surface water pollution risk assessment for your environmental permit - GOV.UK (www.gov.uk).	under IC4a or such other date as agreed in writing with the Environment Agency
	Sanitary substances – H1 annex D2: assessment of sanitary and other pollutants in surface water discharges 1076_14 H1 Annex D2 - Assessment of sanitary and other pollutants within Surface Water Discharges (publishing.service.gov.uk)  The report shall include any proposals and/or additional measures	
	required to prevent or minimise any significant emissions from the installation along with timescales for implementation.	
IC4c	The operator shall implement any improvements identified within the report approved under IC4b in accordance with the Environment Agency's written approval and provide written confirmation to the Environment Agency that the improvements have been completed.	Within 6 months of the report in relation to IC4b being
	(Note, approval of reports under this improvement condition does not preclude the need for permit variation application(s) to operate the improvements identified in the report and/or include any necessary emission limit values).	approved by the Environment Agency or such other date as agreed in writing with the Environment Agency
-	condition to address methane slip emissions from gas engines burnin	
IC5	The operator shall submit a written plan for approval by the Environment Agency which establishes the methane emissions in the exhaust gas from engines burning biogas and or biomethane and compare these to the manufacturer's specification and benchmark levels.	Within 6 months of permit issue or as such other agreed in writing with the
	The plan shall develop proposals to assess the potential for methane slip and take corrective actions where emissions of methane above the manufacturer's specification are identified.	Environment Agency
	The operator shall establish methane emissions in the exhaust gas and methane slip using the following standards:  • EN ISO 25139	
	• EN ISO 25139 • EN ISO 25140	
Improvement of	condition for review of pressure release valves	
IC6	The operator shall submit a written 'pressure release valve review' report and shall obtain the Environment Agency's written approval to it.	Within 6 months of

	provement programme requirements	
Reference	Requirement	Date
	The report shall contain the results of an inspection and program of works undertaken by an appropriately qualified engineer and shall assess the design specification, condition and suitability of pressure release valves and associated pipework on tanks where there is a risk of over or under pressurisation.  The report shall review the pressure relief and vacuum release valves	permit issue or other date as agreed in writing with the Environment Agency
	(PVRV) in line with the criteria set out in section 8.11 (Pressure and vacuum relief control – AD and TAD plants) of Environment Agency guidance, <i>Biological waste treatment: appropriate measures for permitted facilities</i> .	, ,
	The report shall also include, but not be limited to:	
	<ul> <li>A program of works with timescales for the implementation of identified individual improvement measures necessary to demonstrate that the PVRVs are fit for purpose.</li> </ul>	
	A preventative maintenance and inspection regime.	
	The report shall be implemented in accordance with the Environment Agency's written approval.	
Improvement	condition for the abatement of OCUs that do not meet BAT	
IC7	The operator shall submit a written 'abatement plan' and obtain the Environment Agency's written approval to it. The plan shall contain the final designs and an implementation schedule for the installation of abatement plant at emission point A8 that meets the requirements of BAT 34 and BAT 53 of the Waste Treatment BREF. That plan shall also contain but not be limited to:	Within 6 months of permit issue or such other date as agreed in writing with the
	<ul> <li>The plan 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>Evidence that the abatement plant will be designed and installed in accordance with guidance, <i>Biological waste</i></li> </ul>	Environment Agency
	<ul> <li>treatment: appropriate measures for permitted facilities.</li> <li>A program of works with timescales for the commissioning of</li> </ul>	
	the abatement plant infrastructure.	
	The operator shall install and commission the abatement plant in line with the timescales as approved by the Environment Agency.	
	(Note, approval of reports under this improvement condition does not preclude the need for permit variation application(s) to operate the improvements identified in the report and/or include any necessary emission limit values).	

Table S1.3 Improvement programme requirements						
Reference	Requirement	Date				
IC8	The operator shall carry out a review of the abatement plant, OCU at emission point A8 on site, to determine whether the measures have been effective and adequate to prevent, or where this is not possible to minimise, emissions released to air (including but not limited to odour, ammonia, hydrogen chloride (HCI), and TVOC).  The operator shall submit a written report to the Environment Agency following this review for assessment and approval.	Within 6 months from completion of IC7 above or such other date as agreed in writing with the				
		Environment Agency				
	The report shall include but not be limited to the following aspects:					
	Full investigation and characterisation of the waste gas streams.					
	<ul> <li>Evidence that the emission of pollutants in the waste gas stream is being prevented or where this is not possible minimised by the abatement plant.</li> </ul>					
	<ul> <li>Abatement stack monitoring results (including but not limited to odour, ammonia, HCl, and TVOC).</li> </ul>					
	<ul> <li>Abatement process monitoring results (including but not limited to odour, ammonia, HCl, and TVOC).</li> </ul>					
	<ul> <li>Details of air quality quantitative impact assessment including modelling and a proposal for site-specific "action levels" (including but not limited to odour concentration, hydrogen sulphide, ammonia and TVOC).</li> </ul>					
	Odour monitoring results at the site boundary.					
	Records of odour complaints and odour related incidents.					
	<ul> <li>Recommendations for improvement including the replacement or upgrading of the abatement plant.</li> </ul>					
	Timescales for implementation of improvements to the abatement plant.					
	The operator shall implement any improvements in line with the timescales as approved by the Environment Agency.					
	(Note that approval of reports under this improvement condition does not preclude the need for permit variation applications to implement the improvements identified in the report. Any variation may include the insertion of necessary emission limit values).					
	condition for monitoring digestate stability					
IC9	The operator shall submit a written report, with supporting evidence, on the stability of whole digestate, (i.e. prior to dewatering), and obtain the Environment Agency's written approval to it.	Within 6 months of permit issue or such other				
	The report shall assess whether biogas emissions from post digestion storage or treatment of digestate is likely to have been minimised. The report shall include but not be limited to:	date as agreed in writing with the Environment Agency				

Reference	Provement programme requirements Requirement	Date
Reference	An assessment of residual biogas potential in accordance with the OFW004-005 [N6] methodology specified by BSI PAS 110:     Producing Quality Anaerobic Digestate or an equivalent methodology for assessing residual biogas potential of the digestate.	Date
Improvement of	condition for the prevention of excessive flaring and CHP usage	
IC10	The operator shall undertake a review and submit a written report of their findings to the Environment Agency for approval, on the use of the combined heat and power plant.  The report must:  Seek to establish why the CHP engine has intermittent availability  Determine whether the CHP is appropriately sized for the volume of biogas generated at the site  Identify improvements which maximise biogas energy recovery, rather than disposal by flaring  Demonstrate how the identified improvements will satisfy BAT conclusions 15 and 16 of the Waste Treatment BREF  Provide a timescale for implementing the identified improvements.  The improvements proposed and their timescale for implementation must be agreed in writing with the Environment Agency and implemented in accordance with the approved timescale.	Within 1 month of permit issue or such other date as agreed in writing with the Environment Agency

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

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification

Table S2.2 Permitte	d waste types and quantities for anaerobic digestion
Maximum quantity	Annual throughput shall not exceed 1,227,082 tonnes
Exclusions	Wastes having any of the following characteristics shall not be accepted:
	<ul> <li>Biodegradable wastes that is significantly contaminated with non-compostable or digestible contaminants, in particular plastic and litter shall be no more than 5% w/w and shall be as low as reasonably practicable by 31 December 2025.</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 Invasive Species (Amendment etc.) (EU Exit) Regulations 2019.</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> <li>Pest infested waste.</li> </ul>
Waste code	Description
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 06	sludges from physico/chemical treatment other than those mentioned in 19 02 05 (sewage sludge only)
19 08	wastes from waste water treatment plants not otherwise specified
19 08 05	sludges from the treatment of urban waste water

## Schedule 3 – Emissions and monitoring

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Existing medium	combustion plant	which are engi	nes fuelled o	n biogas (1 N	/IW to 5 MW)	
Point A7 on site plan in Schedule 7 TQ 76615 09398	CHP engine 1 stack [note 1]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	500 mg/m³ [note 3]	Average over sample period	Annual	BS EN 14792
		Sulphur dioxide	350 mg/m <sup>3</sup> [note 2]			BS EN 14791 or
		Sulphur dioxide	162 mg/m³ [note 3]			CEN TS 17021 or by calculation based on fuel sulphur
		Carbon monoxide	1400 mg/m <sup>3</sup>			BS EN 15058
		Total VOCs	No limit set			BS EN 12619
Existing medium	combustion plant	other than engi	nes fuelled o	on biogas (1	MW to 5 MW)	
Point A9 on site plan in Schedule 7 TQ 76590 09390	Boiler 1 stack [burning biogas] [note 1]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	250 mg/m³ [note 3]	Average over sample period	Annual	BS EN 14792
		Sulphur dioxide	200 mg/m³ [note 3]			BS EN 14791 or CEN TS 17021 or by calculation based on fuel sulphur
Existing medium to 5 MW)	combustion plant	other than engi	nes and gas	turbines fue	lled on natura	al gas (1 MW
Point A9 on site plan in schedule 7 TQ 76590 09390	Boiler 1 stack [burning natural gas]	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	250 mg/m³ [note 3]	Average over sample period	Annual	BS EN 14792
		Carbon monoxide	No limit set			BS EN 15058

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Point A10 on site plan in schedule 7 TQ 76641 09401	Emergency flare stack [note 1]	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 4]	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
Point A8 on site plan in schedule 7 TQ 76610 09364	Channelled emissions via an odour abatement stack or vent [note 7]	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 6 months	BS EN 13725
7 TQ 76610	Channelled emissions to air from treatment of water-based liquid waste	Hydrogen chloride (HCI)	5 mg/m <sup>3</sup> [note 5]	Average over sample period	Once every 6 months	EN 1911
		TVOC	20 mg/m³ [note 5]	Average over sample period	Once every 6 months	EN 12619
Pressure relief valves [Point A06 on site plan in schedule 7]	Biogas storage	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	
Pressure relief valve [Point A01, A02 and A03 on site plan in schedule 7]	Digester 1, 2 and 3	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	
Pressure relief valve [Point A04 and A05 on site plan in schedule 7]	Post digestion storage tank 1 and 2	Biogas release and operational events	No limit set	Recorded duration and frequency	Daily inspection	
Vents from tank(s)	Oil/Fuel Storage tank(s)	No parameter set	No limit set			

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)		Monitoring frequency	Monitoring standard or method

Note 1 – These emission limits are based on normal operating conditions and load - temperature 0°C (273 K); pressure 101.3 kPa and oxygen 5% (for gas engines burning biogas) and oxygen 3% (for emergency flares and medium combustion plants other than engines and gas turbines burning biogas such as boilers).

- Note 2 This emission limit applies until 31 December 2029, unless the gas engine is replaced.
- Note 3 This emission limit applies from 1 January 2030, unless otherwise advised by the Environment Agency.
- Note 4 Monitoring to be undertaken in the event the emergency flare has been operational for more than 10 per cent of a year (876 hours). Record of operating hours to be submitted annually to the Environment Agency.
- Note 5 Monitoring and limits only apply where the substance concerned is identified as relevant in the waste gas inventory IC8.

Note 7 – The monitoring of NH $_3$  and H $_2$ S can be used as an alternative to the monitoring of the odour concentration subject to the outcome of IC8

	Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter [Note 1]	Limit (incl. unit) [Note 1]	Reference Period	Monitoring frequency [Note 2]	Monitoring standard or method	
S1, S2, S3, S4, S5, S6 and S7 on site	Centrate from centrifuges, site surface water,	Oil and grease	No visible oil or grease		Weekly	Visual assessment	
plan in schedule 7 bunded areas, emission to the English Channel via Bexhill and water from bunded areas, gravity belt thickeners liquor, gas condensate and boiler	bunded areas, gravity belt thickeners liquor,	Benzene, toluene, ethylbenzene, xylene (BTEX)		Spot sample or flow- proportion al composite sample	Once every month	EN ISO 15680	
Hastings WwTW	blowdown	Hydrocarbon oil index (HOI)	10 mg/l		Once every day	EN ISO 9377-2	
		Free cyanide (CN <sup>-</sup> )	0.1 mg/l			EN ISO 14403-1 or EN ISO 14403-2	
		Adsorbable organically bound halogens (AOX)	1 mg/l			EN ISO 9562	
		Arsenic (As)	0.1 mg/l	Spot	Once every	EN ISO	
		Cadmium (Cd)	0.1 mg/l	sample or flow-proportion	day	11885, EN ISO 17294-2 or	
		Chromium (Cr)	0.3 mg/l	al composite		EN ISO 15586	
		Copper (Cu)	0.5 mg/l	sample			
		Lead (Pb)	0.3 mg/l				
		Nickel (Ni)	1 mg/l				
		Zinc (Zn)	2 mg/l				

Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter [Note 1]	Limit (incl. unit) [Note 1]	Reference Period	Monitoring frequency [Note 2]	Monitoring standard or method
		Mercury (Hg)	10 μg/l	Spot sample or flow- proportion	Once every day	EN ISO 17852 or EN ISO 12846
		Manganese (Mn)		al composite sample		EN ISO 11885, EN ISO 17294-2 or EN ISO 15586
		Hexavalent chromium (Cr(VI))	0.1 mg/l			EN ISO 10304-3 or EN ISO 23913
		PFOA and PFOS			Once every six months	

Note 1 – Monitoring and limits only apply where the substance concerned is identified as relevant in the waste water inventory as determined by improvement condition IC4a and IC4b

Note 2 – Monitoring frequency as specified unless the Environment Agency has agreed in writing other alternative appropriate monitoring frequencies.

Table S3.3 Process mor	Table S3.3 Process monitoring requirements							
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications				
Digester feed	7.10 4000		As described	Process				
(digestion process)	Alkalinity	site operating techniques	in site operating	monitoring to be recorded using a				
	Temperature	·	techniques	SCADA system where relevant.				
	Hydraulic loading rate			where relevant.				
	Organic loading rate							
	Volatile fatty acids concentration							
	Ammonia							
	Liquid /foam level							
Biogas in digester [& biogas storage holders]	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					

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
	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	
Digestate batch	Volatile fatty acids concentration  Ammonia  One sample at the end of each batch (hydraulic retention time) cycle.	As described in site		
		operating techniques		
Digesters and storage tanks	Integrity checks	Weekly	Visual assessment	In accordance with design specification and tank integrity checks.
Digesters	Agitation /mixing	Continuous	Systems controls	Records maintained in daily operational records.
	Tank capacity and sediment assessment	Once every 5 years from date of commission	Non- destructive pressure testing integrity assessment every 5 years or as specified by manufacturers technical specification.	In accordance with design specification and tank integrity checks.
Waste reception building or area; digester(s) and storage tank(s)	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary.
Diffuse emissions from all sources identified in the Leak Detection and Repair (LDAR) programme	VOCs including methane	Every 6 months or otherwise agreed in accordance with the LDAR programme	'Sniffing' and/or Optical Gas Imaging techniques in accordance with BS EN 15446 & BS EN 17628	Monitoring points as specified in a DSEAR risk assessment and LDAR programme.  Limit as agreed with the Environment Agency as a percentage of the

Table S3.3 Process monitoring requirements					
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications	
				overall gas production.	
CHP engine stack	VOCs including methane	Annually	BS EN 12619	Total annual VOCs emissions from the CHP engine(s) to be calculated and submitted to the Environment Agency.	
	Exhaust gas temperature		Traceable to National Standards		
	Exhaust gas pressure		Traceable to National Standards		
	Exhaust gas water vapour content		BS EN 14790- 1	Unless gas is dried before analysis of emissions.	
	Exhaust gas oxygen		BS EN 14789		
	Exhaust gas flow		BS EN 16911- 1		
Meteorological conditions	Wind speed, air temperature, wind direction	Continuous	Method as specified in management system	Conditions to be recorded in operational diary and records.  Equipment shall be calibrated on a 4 monthly basis, in accordance with manufacturer's recommendations or as agreed in writing by the Environment Agency.	
Emergency flare	Operating hours	Continuous	Recorded duration and frequency. Recording using a	Date, time and duration of use of auxiliary flare shall be recorded.	
	Quantity of gas sent to emergency flare		SCADA system or similar system	Quantity can be estimated from gas flow composition, heat content, ratio of assistance, velocity, purge	

Table S3.3 Process monitoring requirements					
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications	
				gas flow rate, pollutant emissions.	
Pressure relief valves and vacuum systems	Gas pressure	Continuous	Recording using a SCADA system	Continuous gas pressure shall be monitored.	
	Re-seating	Weekly inspection	Visual	Operator must ensure that valves are re-seated after release in accordance with the manufacturer's design.	
	Inspection, maintenance, calibration, repair and validation	Following foaming or overtopping or at 3 yearly intervals whichever is sooner	Written scheme of examination in accordance with condition 1.1.1	After a foaming event or sticking, build-up of debris, obstructions or damage, operator must ensure that pressure relief valve function remains within designed gas pressure in accordance with the manufacturer's design by suitably trained and qualified personnel.	
	Inspection, calibration and validation report	In accordance with design and construction specifications or after over topping or foaming event	Written scheme of examination in accordance with condition 1.1.1	Operator must ensure that valves are re-seated after release, after a foaming event or sticking, build-up of debris, obstructions or damage.	

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

Table S3.4 Process monitoring requirements – odour abatement					
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications	
Odour abatement plant					
Scrubbers (water/chemi	cal/dry)				
Scrubber 1 (emission point A8)	Gas temperature – inlet and outlet	Continuous	Temperature probe / Traceable to national standards	Odour abatement plant shall be regularly checked and maintained to ensure appropriate temperature and moisture content.  Odour abatement plant shall be managed in accordance with permit condition 3.3, the odour management plan and	
	Gas flow rate – inlet and outlet	Continuous	Gas flow meter		
	Moisture content or humidity – inlet and outlet (for dry scrubbers only)	Daily	Moisture meter		
	Moisture content or humidity – outlet (for wet scrubbers if used before other abatement systems)	Daily	Moisture meter		

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
	Back pressure	Weekly	Pressure differential using sensors	manufacturer's recommendations.  Equipment shall be calibrated on a 4 monthly basis, or as agreed in writing by the Environment Agency.
	Efficiency assessment	Annual	Emission removal efficiency (BS EN 13725 for odour removal)	
	pH scrubber solution (pre-abatement)	Continuous	pH meter	
	pH scrubber solution (post-abatement)	Continuous	pH meter	
	Hydrogen sulphide – inlet and outlet gas stream	Every 6 months or as agreed in writing by the Environment Agency.	CEN TS 13649 for sampling NIOSH 6013 for analysis	Action levels to be agreed on completion of IC8 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 IC8 as approved in writing by the Environment Agency.
				Action levels to be achieved in accordance with permit condition 3.2 and the odour management plan.

Table S3.5 Bio	Table S3.5 Bioaerosols monitoring requirements – ambient monitoring				
Location or description of point of measurement	Parameter	Bioaerosols action levels (CFU m <sup>-3</sup> )	Monitoring frequency	Monitoring standard or method	Other specifications
Upwind of the operational area, as described in the Technical Guidance Note M9	Total bacteria	1000 Note 1	Quarterly for the first year of operation and twice a year thereafter, unless another frequency is agreed in writing by the	In accordance with Technical Guidance Note M9 – Environmental monitoring of bioaerosols at	As described in the Technical Guidance Note M9, including all the additional data
Downwind of the operational area, as described in the Technical Guidance Note M9	Aspergillus Fumigatus	500 Note 1	Environment Agency Note 2	regulated facilities.	requirements specified therein.

Note 1- The bioaerosols action levels are only applicable at downwind sampling locations equivalent to the distance of the nearest sensitive receptor. Where these action levels are elevated, the operator must take action to mitigate the impact on sensitive receptors. Assessment of compliance will be based on risk and in line with guidance.

Note 2. Where the bioaerosols action levels are exceeded, then monitoring remain quarterly until such time that it is demonstrated that the site has adequate mitigation for a 12 month period.

Table S3.6 Emissions to sewer, effluent treatment plant or other transfers off-site – Monitoring points			
Effluent(s) and discharge point(s)	Monitoring type	Monitoring point NGR	Monitoring point reference
S1 on site plan in schedule 7 emission to English Channel via Bexhill and Hastings WwTW discharge from dewatering centrifuges	Effluent	TQ 76600 09348	M1
S2 on site plan in schedule 7 emission to English Channel via Bexhill and Hastings WwTW discharge from site drainage	Effluent	TQ 76556 09318	M2
S3 on site plan in schedule 7 emission to English Channel via Bexhill and Hastings WwTW water from bunded areas	Effluent	TQ 76541 09394	M3

Table S3.6 Emissions to points	Table S3.6 Emissions to sewer, effluent treatment plant or other transfers off-site – Monitoring points			
Effluent(s) and discharge point(s)	Monitoring type	Monitoring point NGR	Monitoring point reference	
S4 on site plan in schedule 7 emission to English Channel via Bexhill and Hastings WwTW water from bunded areas	Effluent	TQ 76561 09319	M4	
S5 on site plan in schedule 7 emission to English Channel via Bexhill and Hastings WwTW discharge from GBTs	Effluent	TQ 76547 09376	M5	
S6 on site plan in schedule 7 emission to English Channel via Bexhill and Hastings WwTW discharge from gas condensate	Effluent	TQ 76510 09383	M6	
S7 on site plan in schedule 7 emission to English Channel via Bexhill and Hastings WwTW discharge of boiler blowdown	Effluent	TQ 76589 09389	M7	

# Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring	Table S4.1 Reporting of monitoring data				
Parameter	Emission or monitoring point/reference	Reporting period	Period begins		
Emissions to air from CHP engines and boilers	A7, A9	Every 12 months	1 January		
Parameters as required by condition 3.5.1.					
Emissions to air from odour abatement plant	A8	Every 6 months	1 January, 1 July		
Parameters as required by condition 3.5.1.					
Emissions to air from abatement systems for waste gas treatment plant	A8	Every 6 months	1 January, 1 July		
Reporting only applies where the substance concerned is identified as relevant in the waste gas inventory IC8					
Parameters as required by condition 3.5.1.					
Emissions to sewer	S1, S2, S3, S4, S5, S6	Upon completion	Upon completion		
Parameters as required by condition 3.5.1	and S7	of IC4a and IC4b	of IC4a and IC4b		
Process monitoring – digester tank integrity Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.3	Every 5 years from the date of commissioning or as per the manufacturer's recommendation, whichever is sooner	1 January		
Process monitoring – under and over pressure relief systems Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.3	Every 12 months Yearly summary report of over- pressure and under-pressure events detailing mass balance release	1 January		
Process monitoring – pressure relief systems - leak detection and repair (inspection, calibration and maintenance)  Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.3	Every 3 years	1 January		
Process monitoring – leak detection and repair surveys Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.3	Every 12 months LDAR report to be submitted annually	1 January		

Table S4.1 Reporting of monitoring	Table S4.1 Reporting of monitoring data				
Parameter	Emission or monitoring point/reference	Reporting period	Period begins		
Process monitoring – use of emergency flare Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.3	Every 12 months	1 January		
Non-compostable contamination removal efficiency Parameters as required by conditions 2.3.4 and 2.3.7		Every 12 months Yearly report of detailing contamination removal efficiency and progress with plastic reduction contamination	1 January		
Total annual VOCs emissions from gas engines (calculated)	As specified in schedule 3 table S3. 3	Every 12 months	1 January		
Bioaerosols monitoring Parameters as required by condition 3.5.1	As specified in schedule 3 table S3.5	Every 3 months or as agreed in writing by the Environment Agency	1 January, 1 April, 1 July, 1 October		

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

Table S4.3 Performance parameters			
Parameter	Frequency of assessment	Units	
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	
CHP engine usage	Annually	hours	
CHP engine efficiency	Annually	%	
Auxiliary boiler usage	Annually	hours	

Table S4.4 Reporting forms				
Media/parameter	Reporting format	Date of form		
Air	Form air 1 or other form as agreed in writing by the Environment Agency	14/02/2025		
Bioaerosols	As specified in the Technical Guidance Note M9 or other form as agreed in writing by the Environment Agency			
Process monitoring	Form process 1 or other form as agreed in writing by the Environment Agency	14/02/2025		
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	14/02/2025		
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	14/02/2025		
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	14/02/2025		
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	14/02/2025		
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.

(b) Notification requirements for the breach of a limit

Emission point reference/ source

Measured value and uncertainty

Date and time of monitoring

To be notified within 24 hours of detection unless otherwise specified below

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

Parameter(s)

(b) Notification requirements for the breach of a limit				
To be notified within 24 hours of	detection unless	otherwise specified be	low	
Measures taken, or intended to be taken, to stop the emission				
Time periods for notification follo	wing detection of	of a breach of a limit		
Parameter			Notification period	
(c) Notification requirements for	the detection of a	any significant adverse	environmental effect	
To be notified within 24 hours of	detection			
Description of where the effect on the environment was detected				
Substances(s) detected				
Concentrations of substances detected				
Date of monitoring/sampling				
Part B – to be submit		n as practicabl	e	
notification under Part A.  Measures taken, or intended to be t	akan to provent			
a recurrence of the incident	aken, to prevent			
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

<sup>\*</sup> authorised to sign on behalf of the operator

### Schedule 6 - Interpretation

"accident" means an accident that may result in pollution.

"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 methanerich biogas and whole digestate.

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

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

"appropriate abatement system" means the appropriate treatment technique for channelled emissions to air defined in 6.6.1 'Channelled emissions to air' from the 'Best Available Techniques (BAT) Reference Document for Waste Treatment'.

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

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

- (a) 'techniques' includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned;
- (b) 'available techniques' means those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator;
- (c) 'best' means most effective in achieving a high general level of protection of the environment as a whole.

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

"Biodegradable" means a material is capable of undergoing biological anaerobic or aerobic degradation leading to the production of CO<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.

"BREF" means Best Available Techniques (BAT) Reference Document.

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

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

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

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

"compliance date" means 01/01/2025 for existing MCPs with net rated thermal input of greater than 5MWth or 01/01/2030 for existing MCPs with a net rated thermal input of less than or equal to 5MWth.

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

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

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

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

"direct discharge" means discharge to a receiving water body.

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

"digestate" means material resulting from an anaerobic digestion process.

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

"DSEAR" means the Dangerous Substances and Explosive Atmospheres Regulations 2002.

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

"emissions to land" includes emissions to groundwater.

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

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

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

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

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

"Indirect discharge" means a discharge to a sewer or off-site waste water treatment plant.

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

"Leak detection and repair (LDAR) programme" means a structured approach to reduce fugitive emissions of organic compounds by detection and subsequent repair or replacement of leaking components. Currently, sniffing (described by EN 15446) and optical gas imaging methods are available for the identification of leaks as set out in BAT 14 and section 6.6.2 of the Waste Treatment BAT Conclusions.

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

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

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

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

"operating hours" means the time, expressed in hours, during which a combustion plant is operating and discharging emissions into the air, excluding start-up and shut-down periods

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

"operator" means in relation to a regulated facility:

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

"pests" means Birds, Vermin and Insects.

"PFOA" means Perfluorooctanoic acid.

"PFOS" means Perfluorooctanesulphonic acid.

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

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

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

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

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

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

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.

"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" and/or "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.

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

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

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

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

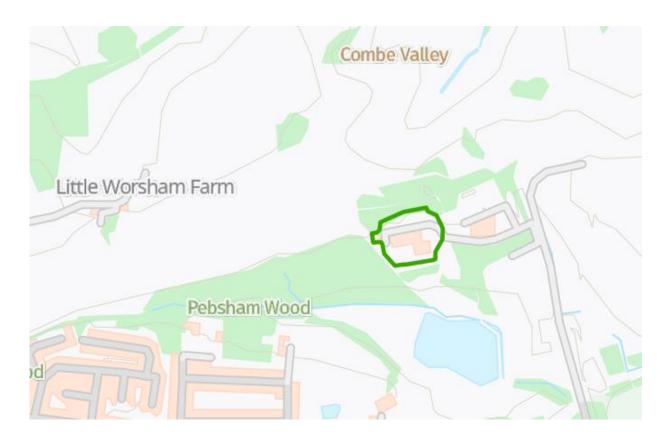
Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

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

"year" means a calendar year ending on 31 December.

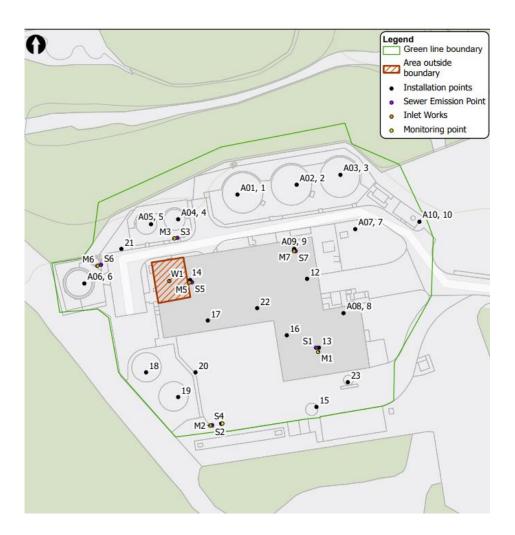
# Schedule 7 – Site plan

#### **Site location**



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## Site layout



Emissions Re	ef Emissions Points	Assets Ref	Assets	х	Υ
A01	Whessoe Valves 1	1	Anaerobic Digester 1	576567	109412
A02	Whessoe Valves 2	2	Anaerobic Digester 2	576591	109416
A03	Whessoe Valves 3	3	Anaerobic Digester 3	576609	109420
A04	Whessoe Valves 4	4	Post digestion storage tanks	576543	109402
A05	Whessoe Valves 5	5	Post digestion storage tanks	576532	109400
A06	Whessoe Valves 6	6	Gas Holder	576505	109376
A07	CHP Unit	7	CHP & Emission monitoring point	576615	109398
A08	Odour control unit	8	Odour scrubbers 1 and H2S Monitoring point	576610	109364
A09	Boiler	9	Boiler	576590	109390
A10	Flare stack	10	Flare stack	576641	109401
		12	Cake reception building	576595	109378
		13	Centrifuge	576600	109350
		14	Gravity Belt Thickeners	576548	109377
		15	Cake storage silo & cake collection area	576599	109326
		16	Polymer & chemical storage	576587	109355
		17	Screenings storage	576555	109361
		18	Combined sludge storage tank	576530	109340
		19	Combined sludge storage tank	576543	109330
		20	General waste skip	576550	109340
		21	Lime storage & lime dosing plant	576520	109390
		22	Thickened Sludge Storage Tank	576575	109366
		23	Cake silo	576612	109336
W1	Inlet works (context only)			576539	109377
S1	Centrifuge liquors			576599	109350
M1	Centrifuge liquors			576600	109348
S2	Surface water			576557	109319
M2	Surface water			576556	109318
S3	Northern bund drainage			576543	109394
M3	Northern bund drainage			576541	109394
S4	Southern bund drainage			576560	109319
M4	Southern bund drainage			576561	109319
M5	Gravity belt thickener liquors			576547	109376
S5	Gravity belt thickener liquors			576548	109376
S6	Gas condensate			576511	109383
M6	Gas condensate			576510	109383
S7	Boiler blowdown			576590	109389
M7	Boiler blowdown			576589	109389

## **Annex 1 of MCP**

Rated thermal input (MW) of the medium combustion plant.	CHP 1 1.84MWth Auxiliary boiler 1.48MWth
2. Type of the medium combustion plant (diesel engine, gas turbine, dual fuel engine, other engine or other medium combustion plant).	CHP 1 – combined heat and power  Auxiliary boiler – dual fuel boiler
3. Type and share of fuels used according to the fuel categories laid down in Annex II.	CHP 1 – biogas  Auxiliary boiler – biogas/natural gas
4. Date of the start of the operation of the medium combustion plant or, where the exact date of the start of the operation is unknown, proof of the fact that the operation started before 20 December 2018.	2013
5. Sector of activity of the medium combustion plant or the facility in which it is applied (NACE code.	E38
6. Expected number of annual operating hours of the medium combustion plant and average load in use.	8760 each
7. Where the option of exemption under Article 6(3) or Article 6(8) is used, a declaration signed by the operator that the medium combustion plant will not be operated more than the number of hours referred to in those paragraphs.	NA
8. Name and registered office of the operator and,	Name:
in the case of stationary medium combustion plants, the address where the plant is located.	Southern Water Services Limited
	Registered address:
	Southern House, Yeoman Road, Worthing, West Sussex, BN13 3NX
	Site name:
	Bexhill and Hastings STC, Freshfields, Off Bexhill Road, St. Leonards-on-Sea, East Sussex, TN18 8FB

**END OF PERMIT**