

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Severn Trent Water Limited

Strongford Sewage Treatment Works Barlaston Old Road Stoke-on-Trent Staffordshire ST12 9EX

Variation application number

EPR/MP3097FY/V002

Permit number

EPR/MP3097FY

Strongford Sewage Treatment Works Permit number EPR/MP3097FY

Introductory note

This introductory note does not form a part of the notice.

Under the Environmental Permitting (England & Wales) Regulations 2010 (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.

The following notice gives notice of the variation of environmental permits EPR/MP3097FY (waste treatment) and EPR/WQ3033LQ (combustion of biogas) referred to in the status logs below and the replacement of those permits with a consolidated environmental permit. EPR/MP3097FY is the lead permit therefore EPR/WQ3033LQ ceases to exist upon the issue of this permit.

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

The Industrial Emissions Directive (IED) was transposed in England and Wales by the Environmental Permitting (England and Wales) (Amendment) Regulations 2013 on 27 February 2013. This variation implements the changes brought about by the IED for "existing facilities operating newly prescribed activities" and completes the transition of this facility from a waste operation to an IED Installation.

Waste is imported by Severn Trent where it will undergo one of three treatment processes:

Anaerobic digestion (AD)

Both indigenous UWWTD derived sludge (from the waste water treatment works on site) and imported waste can be accepted directly in to an anaerobic co-digestion treatment process. This permit only covers the imported waste; the indigenous UWWTD sludge is controlled by separate regulations, therefore the quantities and waste types permitted by this permit only apply to imported waste. The biological treatment of this waste is regulated as two installation activities, one for the blending and mixing of hazardous and non-hazardous wastes (S5.3 A (1) (a) (iii)) before being biologically treated in the AD plant (S5.3 A (1) (a) (ii)).

Following approval by the operator, liquid/sludge waste is discharged into two mixing/holding tanks, fitted with odour control units (ODU). One for high COD and one for low COD wastes. Waste is transferred to one of seven primary digesters (19,000 m³ total capacity) where it undergoes anaerobic treatment for 12 to 19 days. The biogas produced is captured and transferred to two gas storage tanks of metal construction with floating roofs.

Activated carbon filtration systems purify the biogas by removing silicone based compounds such as siloxanes, silonals and silanes before it is combusted in two 2.6 MW spark ignition CHP engines. The CHP engines run on biogas only. The heat and power produced is used on site with any excess being exported to the grid.

Three dual-fuel boilers are also present on site which are utilised if the CHP engines are out of use due to maintenance or breakdown. An auxiliary flare stack burns biogas which cannot be handled by the engines or boilers.

Following treatment in the primary digesters, the digestate is stored in two tanks before being mixed with a polymer coagulant and dewatered by centrifuge. The supernatant liquor is directed back to the head of the STW for aerobic treatment. The sludge cake is transferred to a cake pad where it is conditioned to achieve

pathogen kill. The sludge is analysed to check compliance with the Sludge (Use in Agriculture) Regulations 1989 before being spread to land.

Any liquid, site drainage or condensate produced is directed to the head of the STW.

Aerobic treatment (Waste operation)

Waste can be discharged directly into the pipeline at the head of the sewage treatment works. The waste will undergo aerobic treatment under the UWWTD. The biological treatment of this waste is not regulated by this permit, only its import. The final effluent released by the STW is regulated under a separate discharge consent.

Dewatering (Waste operation)

Digested sludge can be imported for dewatering purposes. It shares the same facilities as the AD treatment process following the digestion of the waste.

The schedules specify the changes made to the permit.

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

Status log of the permit – EPR/MP3097FY			
Description	Date	Comments	
Application EPR/MP3097FY (formerly EAWML 42642)	07/05/95		
Permit determined	23/09/96	Licence issued to Severn Trent Water Limited	
Modification	20/07/98	Deletion and addition of conditions	
Modification	18/06/02	Deletion and addition of conditions	
Modification	04/12/03	Deletion of financial provision requirements	
Received notification of change of company registered office address	29/09/10		
Issue of updated permit pages to show change of company registered office address	14/10/10		
Application EPR/MP3097FY/V002	Duly made 30/09/14	Application to vary and update the permit to modern conditions to reflect changes under IED. This permit will be consolidated with permit EPR/WQ3033LQ. The consolidated permit will remain under EPR/MP3097FY.	
Variation determined EPR/MP3097FY (Billing ref: CP3432WD)	15/03/17	Varied and consolidated permit issued in modern condition format.	

Status log of the permit – EPR/WP3033LQ		
Description Date		Comments
Application received WP3033LQ (EAWML 400049)	Duly made 18/04/06	
Additional information received	24/05/06	
Additional information received	13/06/06	

Status log of the permit – EPR/WP3033LQ			
Description	Date	Comments	
Schedule 4 information received	11/09/06		
Additional information received	24/10/06		
Additional information received	30/10/06		
Permit determined (PAS ref: WP3033LQ)	24/10/07	Permit issued to Severn Trent Water Limited for combustion of biogas generated at the sewage treatment works.	
Variation application EPR/WP3033LQ/V002	Duly made 01/09/10		
Schedule 4 information received	05/10/10		
Variation issued EPR/WP3033LQ/V002 (PAS ref: MP3834TE)	29/10/10	Amended operating techniques to reflect use of activated carbon filtration for purification of methane biogas.	
Agency led variation determined EPR/WP3033LQ/V003 (PAS ref:YP3334ZQ)	08/04/13	Agency led variation to implement changes under IED.	
Variation application EPR/WP3033LQ/V004	Duly made 30/09/14	Application made to consolidate permit with EPR/MP3097FY and reflect IED changes.	
Variation issued	15/03/17	Now consolidated in to permit EPR/MP3097FY.	

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulations 18 and 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates environmental permits

Permit numbers

EPR/MP3097FY EPR/WP3033LQ

Issued to

Severn Trent Water Limited ("the operator")

whose registered office is

Severn Trent Centre 2 St. John's Street Coventry CV1 2LZ

company registration number 02366619

to operate a regulated facility at

Strongford Sewage Treatment Works Barlaston Old Road Stoke-on-Trent Staffordshire ST12 9EX

to the extent set out in the schedules.

The notice shall take effect from 15/03/2017

The number of the consolidated permit is EPR/MP3097FY

Name	Date
Rebecca Warren	15/03/2017

Authorised on behalf of the Environment Agency

Schedule 1

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

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/MP3097FY

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/MP3097FY/V002 authorising,

Severn Trent Water Limited ("the operator"),

whose registered office is

Severn Trent Centre 2 St. John's Street Coventry CV1 2LZ

company registration number 02366619

to operate an installation at

Strongford Sewage Treatment Works Barlaston Old Road Stoke-on-Trent Staffordshire ST12 9EX

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

Name	Date
Rebecca Warren	15/03/2017

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

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

Energy efficiency

- 1.2.1 For the following activities referenced in schedule 1, table S1.1, A1 to A10, 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.

Efficient use of raw materials

- 1.3.1 For the following activities referenced in schedule 1, table S1.1, A1 to A10, 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 Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

2.2 The site

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

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
 - (a) it is of a type and quantity listed in schedule 2 tables S2.2, S2.3, S2.4 and S2.5; and
 - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 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.

2.4 Improvement programme

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

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

2.5 Hazardous waste storage and treatment

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

3 Emissions and monitoring

3.1 Emissions to water, air or land

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

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
 - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

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

3.4 Noise and vibration

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

3.4.2 The operator shall:

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

3.5 Monitoring

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

3.6 Pests

- 3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.6.2 The operator shall:
 - (a) 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;
 - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

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

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 For the following activities referenced in schedule 1, table S1.1, A1 to A10, 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.

4.3 Notifications

- 4.3.1 For the following activities referenced in schedule 1, table S1.1, A1 to A10, 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,
 - 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 For the following activities referenced in schedule 1, table S1.1, A11 to A12, the Environment Agency shall be notified without delay following the detection of:
 - (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;
 - (b) the breach of a limit specified in the permit; or
 - (c) any significant adverse environmental effects.
- 4.3.4 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.5 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.
- 4.3.6 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:

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

In any other case:

- (e) the death of any of the named operators (where the operator consists of more than one named individual);
- (f) any change in the operator's name(s) or address(es); and
- (g) 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.
- 4.3.7 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.
- 4.3.8 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 For the following activities referenced in schedule 1, table S1.1, A1 to A10, 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.
- 4.4.3 For the following activities referenced in schedule 1, table S1.1, A11 to A12, in this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1	Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types	
A1	S5.3 A(1) (a) (iii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving blending or mixing prior to submission to any of the other activities listed in S5.3 A(1).	R3: Recycling reclamation of organic substances which are not used as solvents	From the receipt of hazardous and non-hazardous wastes to despatch for anaerobic digestion (A2) for recovery. Blending and mixing of imported waste with UWWTD derived sludge from within the works in enclosed tanks fitted with appropriate odour abatement and on an impermeable surface with sealed drainage.	
			Waste types suitable for acceptance are limited to those specified in Tables S2.2, S2.3 and S2.4.	
A2	S5.3 A(1) (a) (i) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving biological treatment.	R3: Recycling reclamation of organic substances which are not used as solvents	From receipt of waste from the blending and mixing tanks (A1) through to digestion and recovery of by-products (digestate).	
			Anaerobic digestion of wastes in seven tanks followed by burning of biogas produced from the process.	
			Waste types suitable for acceptance are limited to those specified in Tables S2.2, S2.3 and S2.4 which are mixed under activity A1.	
	Directly Associated Activity			
A3	Digestate storage	R13: Storage of waste pending the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Storage of digestate produced at the on-site anaerobic digestion process in two storage tanks on an impermeable surface with sealed drainage system prior to treatment.	

Table S	1.1 activities		
A4	Digestate treatment	R3: Recycling reclamation of organic substances which are not used as solvents	Treatment of digestate in an enclosed tank on an impermeable surface with sealed drainage system, including screening to remove contraries, centrifuge or pressing and addition of thickening agents (polymers) or drying.
A5	Treatment and storage of cake	R3: Recycling reclamation of organic substances which are not used as solvents R13: Storage of waste pending the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Storage and treatment of digestate cake on an impermeable surface with sealed drainage system, including mixing with lime to achieve pathogen kill prior to despatch off site.
A6	Gas treatment and storage	Treatment and storage of biogas produced from on-site anaerobic digestion of permitted waste in 2 standalone tanks.	Storage of biogas produced at the on-site anaerobic digestion process. Gas cleaning by biological or chemical scrubbing prior to use within the facility.
A7	Steam and electrical power supply	R1:Use principally as a fuel to generate energy	Combustion of biogas produced at the on-site anaerobic digestion process in two combined heat and power (CHP) engines with an aggregated thermal input of 5.2 MWth. Combustion of biogas in three auxiliary boilers with an aggregated thermal input of 2.24 MWth.
A8	Auxiliary flare operation	D10: Incineration on land	From the receipt of biogas produced at the on-site anaerobic digestion process to incineration with the release of combustion gases. Use of one auxiliary flare required only during periods of breakdown or maintenance of the CHP engines and/or auxiliary boilers.
A9	Raw material storage	Storage of raw materials including lubricating oil, water treatment chemicals, glycol, polymer (dry, powder), ferrous chloride, ferric sulphate, antifoam, nutriox, lime.	From the receipt of raw materials for use within the facility

Table S1.1	Table S1.1 activities				
A10	Surface water collection	Collection of site surface and process water/liquor.		The collection of site surface and process water/liquor for re-use within the facility or transfer to the head of the waste water treatment works.	
Activity reference	Description of activities for voperations	waste	Limits of activ	rities	
A11	D13: Blending or mixing prior to submission to any of the operations numbered D1 to D12		Deposit of imported waste to the head of the waste water treatment works pending aerobic treatment at the waste water treatment works.		
				uitable for acceptance are e specified in Tables S2.2, S2.3	
A12	R3: Recycling/reclamation of organic substances which are not used as solvents		From the recei dispatch off sit	pt of digested sludge to e for recovery.	
	R13: Storage of waste pending the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)		surface with se including scree centrifuge or p thickening age	igestate on an impermeable caled drainage system, ening to remove contraries, ressing and addition of nts (polymers) or drying and e to achieve pathogen kill.	
				uitable for acceptance are specified in Table S2.5.	

Table S1.2 Operating techniques			
Description	Parts	Date Received	
Application (WP3033LQ)	The response to section 2.1 and 2.2 in the Application.	18/04/06	
Schedule 4 Notice Request dated 28/07/06 (WP3033LQ)	Entire response	11/09/06	
Request for further information dated 21/12/06 (WP3033LQ)	Entire response	25/06/07	
Variation application EPR/WP3033LQ/V002	Response to questions in application form EPC-Part C	01/09/10	
Response to Schedule 5 notice dated 08/09/10	Response to all questions	05/10/10	
Application EPR/MP3097FY/V002	Part C3 - Section 3a (technical standards). Part C3 - Section 3d, Table 6 (information of specific sectors)	30/09/14	
Further information submitted for application EPR/MP3097FY/V002	Severn Trent Water's waste acceptance procedures document 'Standard Procedure, Business Services – Tankered Trade Waste (TTW)', dated Jan 2016 (Ref TWSS004 TTW Approval Process v3) or subsequent variations as agreed in writing with the Environment Agency.	12/02/16	

Table S1.3 Improvement programme requirements			
Reference	Requirement	Date	
IC1 (In relation to EPR/WP3033LQ)	The Operator shall undertake an assessment of the containment measures at the installation. This shall include proposals to improve the collection and routing of the condensate to the site drainage system.	Complete	
	The assessment shall take into account the requirements given in Box 5 of the Environment Agency Technical Guidance Note IPPC H7.		
	A written report summarising the findings shall be submitted to the Agency for approval. A timescale for the implementation of any improvements shall be agreed with the Agency in writing.		
	The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report.		
IC2 (In relation to EPR/WP3033LQ)	The Operator shall develop a monitoring plan to be submitted to the Agency in writing that shall detail the proposed methodologies to be used within the installation to carry out the monitoring of air emissions and performance measures identified within Tables S3.1, S4.1 and S4.4. The methodology for the monitoring of emissions to air from emission points A1 and A2 and A7-A11 shall comply with the requirements of Agency monitoring guidance documents:	Complete	
	 M1 – Sampling Requirements For Stack Emissions Monitoring; 		
	M2 – Monitoring Of Stack Emissions To Air; and		
	Section 2.10 of Agency Combustion Technical Guidance Note.		
	The plan shall be implemented by the operator from the date of approval in writing by the Agency.		
IC3 (In relation to EPR/WP3033LQ)	The Operator shall submit a written Accident Management Plan for approval by the Environment Agency. The plan shall have regard to the requirements set out in section 2.8 of IPPC Sector Guidance Note for Combustion Activities V2.03, July 2005.	Complete	
	The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.		
	The plan shall be implemented by the operator from the date of approval in writing by the Environment Agency.		
IC4 (In relation to EPR/WP3033LQ)	The Operator shall review the installation's Environment Management System. Severn Trent Water plc EMS protocols shall be fully extended to the CHP installation, having regard to the requirements set out in section 2.3 of IPPC Sector Guidance Note for Combustion Activities V2.03, July 2005. Written evidence shall be supplied to the Environment Agency for approval.	Complete	
	The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of this evidence.		
IC5 (In relation to EPR/WP3033LQ)	The Operator shall review the level of NOx and SO2 emissions following completion of the monitoring exercise carried out in accordance with improvement condition IC2 to determine actual values for the releases to air.	Complete	
	The Operator shall use these detailed release data to establish the actual impact on air quality through the use of an appropriate air dispersion model. The results of the review and modelling shall be submitted to the Agency in a written report.		

- ·	Table S1.3 Improvement programme requirements			
Reference	Requirement	Date		
IC6 (In relation to EPR/WP3033LQ)	The Operator shall complete the development of the Site Energy Management Plan, having regard to the requirements set out in 2.7 of the IPPC Sector Guidance Note for Combustion Activities. A copy of the plan shall be supplied in writing for approval to the Environment Agency. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan. The plan shall be implemented by the operator from the date of approval in writing by the Environment Agency.	Complete		
107		Complete		
IC7 (In relation to EPR/WP3033LQ)	The Operator shall develop a Site Closure Plan having regard to the requirements set out in Section 2.11 of the IPPC Sector Guidance Note for Combustion Activities V2.03, July 2005. Upon completion of the plan a summary of the document shall be submitted to the Environment Agency in writing for approval.	Complete		
	The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.			
IC8 (In relation to EPR/WP3033LQ)	The Operator shall undertake a review to identify all appropriate options for reducing the emissions to air to at least the benchmark standards in the Agency Technical Guidance Note for Combustion and to ensure that the releases to air do not result in a significant contribution to an exceedence of an Air Quality Objective or European Union Limit Value. Where an exceedence of an EU limit Value is predicted and the operations would provide a significant contribution to the exceedence then the review shall assess whether it is necessary to implement measures beyond indicative BAT in order to ensure that the contribution is minimised.	Complete		
	The review shall include, but not be limited to, the primary and secondary measures for the reduction of the relevant pollutants listed in the Agency Technical Guidance Note for Combustion (or other appropriate guidance), identification of the most appropriate stack height for dispersion of the waste gases and either pretreatment of fuel or abatement of releases to air post combustion as appropriate. Where measures can be undertaken to limit the impact on air quality in the short term whilst long term solutions are implemented then the report should include proposals for both short term and long term measures as appropriate. The operator shall submit a written report, for approval by the Environment Agency, detailing the elements of the review and its conclusions and shall include a programme for implementation of the appropriate measures including a timetable for their			
	the appropriate measures, including a timetable for their implementation.			
IC9	The operator shall revise their waste acceptance procedures as referred to in Table S1.2 of this permit and submit it to the Environment Agency for approval. The procedures shall detail 3 levels of assessment for determining if a waste is suitable to be accepted into the anaerobic digestion treatment process. The 3 levels of assessment shall refer to:	30/04/17		
	'Group A wastes' - as listed in Table S2.2 of this permit;			
	 'Group B wastes' - as listed in Table S2.3 of this permit; 'Group C wastes' - as listed in Table S2.4 of this permit. 			

Table S1.3 Im	provement programme requirements	
Reference	Requirement	Date
	The revised procedures shall take into account the requirements of:	
	sections 2.1.1 and 2.1.2 of Sector Guidance Note IPPC S5.06 Guidance for the Treatment of Hazardous and Non-Hazardous Waste; and	
	 How to comply with your environmental permit, Additional Guidance for: Anaerobic Digestion – Reference LIT8737 – Report Version 1.0, November 2013. 	
	Technical Guidance WM3 – Guidance on the classification and assessment of waste.	
	 Framework for Assessing Suitability of Wastes Going to Anaerobic Digestion, Composting and Biological Treatment – Framework Guidance note, July 2013. 	
	Once approved, the procedures shall be incorporated into the document 'Standard Procedure, Business Services – Tankered Trade Waste (TTW)' referred to in Table S1.2 (operating techniques) of this permit.	
IC10	The operator shall submit a revised odour management plan to the Environment Agency for written approval. The plan shall take into account the appropriate measures for odour control specified in section 2.2.6 of Sector Guidance Note IPPC S5.06 – Guidance for the Treatment of Hazardous and Non-Hazardous Waste. The plan shall also incorporate all the required detailed information as specified in the Environment Agency's Horizontal Guidance H4 – Odour Management. The plan must contain dates for implementation of individual	15/09/17
	measures.	
IC11	The Operator shall submit a drainage plan to the Environment Agency. The plan shall detail surface water drainage and process water drainage, including imported effluent pipelines (a detailed plan of the UWWT process is not necessary)	15/09/17

Schedule 2 – Waste types, raw materials and fuels

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

Table S2.2	Permitted waste types and quantities for anaerobic digestion (Group A)
Maximum	Annual throughput of waste at the site (aggregated for all activities) shall not exceed:
quantity	430,000 tonnes of non-hazardous waste; and
	34,750 tonnes of hazardous waste.
	(These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)
Waste code	Description
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 01	sludges from washing and cleaning – food processing waste, food washing waste
02 01 02	animal-tissue waste including blood, animal flesh, fish processing waste, fish carcasses, poultry waste
02 01 03	plant-tissue waste including husks, cereal dust, waste animal feeds, off-cuts from vegetable and fruit and other vegetation waste
02 01 06	animal faeces, urine and manure including spoiled straw
02 01 07	wastes from forestry
02 01 99	residues from commercial mushroom cultivation
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 01	sludges from washing and cleaning, process water, food washing waste
02 02 02	animal-tissue waste including blood, animal flesh, fish processing waste, fish carcasses, poultry waste
02 02 03	materials unsuitable for consumption or processing
02 02 04	sludges from on-site effluent treatment
02 02 99	sludges from gelatine production, animal gut contents
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
02 03 99	sludge from production of edible fats and oils, seasoning residues, molasses residues, residues from production of potato, corn or rice starch only

Table S2.2	Permitted waste types and quantities for anaerobic digestion (Group A)
Maximum quantity	Annual throughput of waste at the site (aggregated for all activities) shall not exceed: 430,000 tonnes of non-hazardous waste; and 34,750 tonnes of hazardous waste. (These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)
Waste code	Description
02 04	wastes from sugar processing
02 04 03	sludges from on-site effluent treatment
02 04 99	other wastes
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing including solid and liquid dairy products, milk, food processing wastes, yoghurt, whey
02 05 02	sludges from on-site effluent treatment
02 06	wastes from the baking and confectionery industry
02 06 01	materials unsuitable for consumption or processing including condemned food, food processing wastes, biscuits, chocolate, yeast, bread, bakery wastes
02 06 03	sludges from on-site effluent treatment
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials including brewing waste, food processing waste, fermentation waste
02 07 02	wastes from spirits distillation including spent grains, fruit and potato pulp, sludge from distilleries
02 07 04	materials unsuitable for consumption or processing including brewing waste, food processing waste, fermentation waste, beer, alcoholic drinks, fruit juice
02 07 05	sludges from on-site effluent treatment
02 07 99	spent grains, hops and whisky filter sheets/cloths, yeast and yeast-like residues, sludge from production process
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 01	Wastes from wood processing and the production of panels and furniture
03 01 01	Untreated waste bark and cork
03 01 05	Untreated sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	wastes from pulp, paper and cardboard production and processing
03 03 02	green liquor sludge
03 03 08	paper and cardboard – not allowed if any non-biodegradable coating or preserving substance is present
03 03 10	Fibre rejects, fibre-, filler- and coating-sludges from mechanical separation (de-inked only)
03 03 11	Sludges from on-site effluent treatment other than those mentioned in 03 03 10 (Only allowed if not mixed with, or does not contain, de-inking sludge)

Table S2.2	Permitted waste types and quantities for anaerobic digestion (Group A)
Maximum quantity	Annual throughput of waste at the site (aggregated for all activities) shall not exceed: 430,000 tonnes of non-hazardous waste; and 34,750 tonnes of hazardous waste. (These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)
Waste code	Description
04	Wastes from the leather, fur and textile industries
04 01	wastes from the leather and fur industry
04 01 01	fleshings and lime split wastes
04 01 05	tanning liquor free of chromium
04 01 07	sludges not containing chromium
04 02	wastes from the textile industry
04 02 10	organic matter from natural products, e.g. grease, wax
07	Wastes from organic chemical processes
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
07 01 08*	glycerol waste from bio-diesel manufacture from non-waste vegetable oils only
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging – not allowed if any non-biodegradable coating or preserving substance is present
15 01 02	biodegradable plastic packaging – must be independently certified to BS EN 13432
15 01 03	Untreated wooden packaging – not allowed if any non-biodegradable coating or preserving
	substance is present
15 01 05	
15 01 05 16	substance is present composite packaging – must conform to BS EN 13432 and not allowed if any non-
	substance is present composite packaging – must conform to BS EN 13432 and not allowed if any non-biodegradable coating or preserving substance is present
16	substance is present composite packaging – must conform to BS EN 13432 and not allowed if any non-biodegradable coating or preserving substance is present Wastes not otherwise specified in the list
16 16 10	substance is present composite packaging – must conform to BS EN 13432 and not allowed if any non-biodegradable coating or preserving substance is present Wastes not otherwise specified in the list aqueous liquid wastes destined for off-site treatment liquor/leachate from a composting process that accepts waste input types listed in this table,
16 16 10 16 10 02	substance is present composite packaging – must conform to BS EN 13432 and not allowed if any non-biodegradable coating or preserving substance is present Wastes not otherwise specified in the list aqueous liquid wastes destined for off-site treatment liquor/leachate from a composting process that accepts waste input types listed in this table, Table S2,2, only Wastes from waste management facilities, off-site waste water treatment plants and
16 16 10 16 10 02 19	substance is present composite packaging – must conform to BS EN 13432 and not allowed if any non-biodegradable coating or preserving substance is present Wastes not otherwise specified in the list aqueous liquid wastes destined for off-site treatment liquor/leachate from a composting process that accepts waste input types listed in this table, Table S2,2, only 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 wastes from physico/chemical treatments of waste (including dechromatation,
16 16 10 16 10 02 19 19 02	substance is present composite packaging – must conform to BS EN 13432 and not allowed if any non-biodegradable coating or preserving substance is present Wastes not otherwise specified in the list aqueous liquid wastes destined for off-site treatment liquor/leachate from a composting process that accepts waste input types listed in this table, Table S2,2, only 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 wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)

Permitted waste types and quantities for anaerobic digestion (Group A)
Annual throughput of waste at the site (aggregated for all activities) shall not exceed: 430,000 tonnes of non-hazardous waste; and 34,750 tonnes of hazardous waste. (These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)
Description
Wastes from the aerobic treatments of wastes
Non-composted fraction of municipal and similar wastes (Acceptable only if derived solely from input types allowed by this table, Table S2.2, and remains segregated from, and uncontaminated by, any other waste type)
Non-composted fraction of animal and vegetable waste (Acceptable only if derived solely from input types allowed by this table, Table S2.2, and remains segregated from, and uncontaminated by, any other waste type)
Off-specification compost (Acceptable only if derived solely from input types allowed by this table, Table S2.2, and remains segregated from, and uncontaminated by, any other waste type)
wastes from anaerobic treatment of waste
liquor from anaerobic treatment of municipal waste (from a process that treats wastes which are listed in this table, Table S2.2, only)
digestate from anaerobic treatment of source segregated biodegradable waste (from a process that treats wastes which are listed in this table, Table S2.2, only)
liquor from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table, Table S2.2, only)
digestate from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table, Table S2.2, only)
wastes from waste water treatment plants not otherwise specified
screenings
sewage grit (waste from de-sanding) only
sludges from treatment of urban waste water
grease and oil mixture containing edible oils and fats
sludges from industrial biological treatment
Centrate liquor only
wastes from the preparation of water intended for human consumption or water for industrial use
sludges from water clarification
sludges from decarbonation
solutions and sludges from regeneration of ion exchangers
wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
waste types listed in this table, Table S2.2, that have been subjected to mechanical treatment only

Table S2.2	Permitted waste types and quantities for anaerobic digestion (Group A)
Maximum	Annual throughput of waste at the site (aggregated for all activities) shall not exceed:
quantity	430,000 tonnes of non-hazardous waste; and
	34,750 tonnes of hazardous waste.
	(These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)
Waste code	Description
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard – not allowed if any non-biodegradable coating or preserving substance is present. Excludes laminates such as Tetrapaks.
20 01 08	kitchen and canteen waste
20 01 25	edible oil and fat
20 01 38	untreated wood where no non-biodegradable coating or preserving substance is present
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 03	other municipal wastes
20 03 01	mixed municipal waste – separately collected biowastes
20 03 02	waste from markets – allowed only if source segregated biodegradable fractions e.g. plant material, fruit and vegetables
20 03 04	septic tank sludge
20 03 06	waste from sewage cleaning
20 03 99	cesspool waste and other sewage sludge only

Table S2.3	Permitted waste types and quantities for anaerobic digestion (Group B)
Maximum Quantity	Annual throughput of waste at the site (aggregated for all activities) shall not exceed: 430,000 tonnes of non-hazardous waste; and 34,750 tonnes of hazardous waste. (These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)
Waste code	Description
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 02	wastes from preserving agents
02 05	wastes from the dairy products industry
02 05 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances that will inhibit biological treatment e.g. EA emergency spillage containment
02 06	wastes from the baking and confectionery industry
02 06 02	wastes from preserving agents
02 06 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment e.g. Interceptor waste
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
02 07 03	wastes from chemical treatment
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 03	wastes from pulp, paper and cardboard production and processing
03 03 05	de-inking sludges from paper recycling
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 99	wastes not otherwise specified – Washwaters not containing substances at levels that will inhibit biological treatment e.g. from plant cleaning
04	Wastes from the leather, fur and textile industries
04 01	wastes from the leather and fur industry
04 01 09	wastes from dressing and finishing
04 01 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment e.g. Interceptor waste
04 02	wastes from the textile industry
04 02 17	dyestuffs and pigments other than those mentioned in 04 02 16
04 02 20	sludges from on-site effluent treatment other than those mentioned in 04 02 19
04 02 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
06	Wastes from inorganic chemical processes
06 05	sludges from on-site effluent treatment
06 05 03	sludges from on-site effluent treatment other than those mentioned in 06 05 02

Maximum	Permitted waste types and quantities for anaerobic digestion (Group B) Annual throughput of waste at the site (aggregated for all activities) shall not exceed:
Quantity	430,000 tonnes of non-hazardous waste; and
	34,750 tonnes of hazardous waste.
	(These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)
Waste code	Description
07	Wastes from organic chemical processes
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
07 01 01*	aqueous washing liquids and mother liquors
07 01 11*	sludges from on-site effluent treatment containing hazardous substances
07 01 12	sludges from on-site effluent treatment other than those mentioned in 07 01 11
80	Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks
08 03	wastes from MFSU of printing inks
08 03 07	aqueous sludges containing ink
08 03 08	aqueous liquid waste containing ink
08 03 14*	ink sludges containing hazardous substances
08 03 15	ink sludges other than those mentioned in 08 03 14
16	Wastes not otherwise specified in the list
16 01	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)
	antiference fluide containing homestones and the second
16 01 14*	antifreeze fluids containing hazardous substances
16 01 14* 16 01 15	antifreeze fluids containing nazardous substances antifreeze fluids other than those mentioned in 16 01 14
16 01 15	antifreeze fluids other than those mentioned in 16 01 14
16 01 15 16 03	antifreeze fluids other than those mentioned in 16 01 14 off-specification batches and unused products
16 01 15 16 03 16 03 05*	antifreeze fluids other than those mentioned in 16 01 14 off-specification batches and unused products organic wastes containing hazardous substances
16 01 15 16 03 16 03 05* 16 03 06	antifreeze fluids other than those mentioned in 16 01 14 off-specification batches and unused products organic wastes containing hazardous substances organic wastes other than those mentioned in 16 03 05 Wastes from waste management facilities, off-site waste water treatment plants and
16 01 15 16 03 16 03 05* 16 03 06 19	antifreeze fluids other than those mentioned in 16 01 14 off-specification batches and unused products organic wastes containing hazardous substances organic wastes other than those mentioned in 16 03 05 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
16 01 15 16 03 16 03 05* 16 03 06 19 19 06	antifreeze fluids other than those mentioned in 16 01 14 off-specification batches and unused products organic wastes containing hazardous substances organic wastes other than those mentioned in 16 03 05 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 wastes from anaerobic treatment of waste wastes not otherwise specified – Aqueous process waters and washwaters not containing
16 01 15 16 03 16 03 05* 16 03 06 19 19 06 19 06 99	antifreeze fluids other than those mentioned in 16 01 14 off-specification batches and unused products organic wastes containing hazardous substances organic wastes other than those mentioned in 16 03 05 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 wastes from anaerobic treatment of waste wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
16 01 15 16 03 16 03 05* 16 03 06 19 19 06 19 06 99	antifreeze fluids other than those mentioned in 16 01 14 off-specification batches and unused products organic wastes containing hazardous substances organic wastes other than those mentioned in 16 03 05 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 wastes from anaerobic treatment of waste wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment landfill leachate
16 01 15 16 03 16 03 05* 16 03 06 19 19 06 19 07 19 07 19 07 02*	antifreeze fluids other than those mentioned in 16 01 14 off-specification batches and unused products organic wastes containing hazardous substances organic wastes other than those mentioned in 16 03 05 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 wastes from anaerobic treatment of waste wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment landfill leachate landfill leachate containing hazardous substances
16 01 15 16 03 16 03 05* 16 03 06 19 19 06 19 07 19 07 19 07 02* 19 07 03	antifreeze fluids other than those mentioned in 16 01 14 off-specification batches and unused products organic wastes containing hazardous substances organic wastes other than those mentioned in 16 03 05 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 wastes from anaerobic treatment of waste wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment landfill leachate landfill leachate containing hazardous substances landfill leachate other than those mentioned in 19 07 02
16 01 15 16 03 16 03 05* 16 03 06 19 19 06 19 07 19 07 02* 19 07 03 19 08	antifreeze fluids other than those mentioned in 16 01 14 off-specification batches and unused products organic wastes containing hazardous substances organic wastes other than those mentioned in 16 03 05 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 wastes from anaerobic treatment of waste wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment landfill leachate landfill leachate containing hazardous substances landfill leachate other than those mentioned in 19 07 02 wastes from waste water treatment plants not otherwise specified
16 01 15 16 03 16 03 05* 16 03 06 19 19 06 19 07 19 07 02* 19 07 03 19 08 19 08 10*	antifreeze fluids other than those mentioned in 16 01 14 off-specification batches and unused products organic wastes containing hazardous substances organic wastes other than those mentioned in 16 03 05 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 wastes from anaerobic treatment of waste wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment landfill leachate landfill leachate containing hazardous substances landfill leachate other than those mentioned in 19 07 02 wastes from waste water treatment plants not otherwise specified grease and oil mixture from oil/water separation other than those mentioned in 19 08 09
16 01 15 16 03 16 03 05* 16 03 06 19 19 06 19 07 19 07 02* 19 07 03 19 08 19 08 10* 19 08 11*	antifreeze fluids other than those mentioned in 16 01 14 off-specification batches and unused products organic wastes containing hazardous substances organic wastes other than those mentioned in 16 03 05 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 wastes from anaerobic treatment of waste wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment landfill leachate landfill leachate containing hazardous substances landfill leachate other than those mentioned in 19 07 02 wastes from waste water treatment plants not otherwise specified grease and oil mixture from oil/water separation other than those mentioned in 19 08 09 sludges containing hazardous substances from biological treatment of industrial waste water

Table S2.3	Table S2.3 Permitted waste types and quantities for anaerobic digestion (Group B)	
Maximum	Annual throughput of waste at the site (aggregated for all activities) shall not exceed:	
Quantity	430,000 tonnes of non-hazardous waste; and	
	34,750 tonnes of hazardous waste.	
	(These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)	
Waste code	Description	
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	
20 01	separately collected fractions (except 15 01)	
20 01 14*	acids	
20 01 15*	alkalines	
20 01 30	detergents other than those mentioned in 20 01 29	

Table S2.4	Permitted waste types and quantities for anaerobic digestion (Group C)
Maximum Quantity	Annual throughput of waste at the site (aggregated for all activities) shall not exceed:
Quantity	430,000 tonnes of non-hazardous waste; and 34,750 tonnes of hazardous waste.
	(These quantities do not include indigenous UWWTD derived sludge from within the waste
	water treatment works)
Waste code	Description
01	Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals
01 05	drilling muds and other drilling wastes
01 05 04	freshwater drilling muds and wastes
01 05 05*	oil-containing drilling muds and wastes
01 05 06*	drilling muds and other drilling wastes containing hazardous substances
01 05 07	barite-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06
01 05 08	chloride-containing drilling muds and wastes other than those mentioned in 01 05 05 and 01 05 06
01 05 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 01	sludges from washing and cleaning
02 01 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
02 02	
02 02 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 03	wastes from solvent extraction
02 03 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing
02 06	wastes from the baking and confectionery industry
02 06 01	materials unsuitable for consumption or processing
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials
02 07 02	wastes from spirits distillation
02 07 04	materials unsuitable for consumption or processing
02 07 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
· · · · · · · · · · · · · · · · · · ·	

Table S2.4	Permitted waste types and quantities for anaerobic digestion (Group C)
Maximum Quantity	Annual throughput of waste at the site (aggregated for all activities) shall not exceed: 430,000 tonnes of non-hazardous waste; and 34,750 tonnes of hazardous waste. (These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)
Waste code	Description
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 01	wastes from wood processing and the production of panels and furniture
03 01 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
03 03	wastes from pulp, paper and cardboard production and processing
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10
04	Wastes from the leather, fur and textile industries
04 02	wastes from the textile industry
04 02 09	wastes from composite materials (impregnated textile, elastomer, plastomer)
04 02 14*	wastes from finishing containing organic solvents
04 02 15	wastes from finishing other than those mentioned in 04 02 14
05	Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal
05 01	wastes from petroleum refining
05 01 10	sludges from on-site effluent treatment other than those mentioned in 05 01 09
05 07	wastes from natural gas purification and transportation
05 07 02	wastes containing sulphur
06	Wastes from inorganic chemical processes
06 01	wastes from the manufacture, formulation, supply and use (MFSU) of acids
06 01 06*	other acids
06 01 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
06 02	wastes from the MFSU of bases
06 02 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
06 03	wastes from the MFSU of salts and their solutions and metallic oxides
06 03 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
06 05	sludges from on-site effluent treatment
06 05 02*	sludges from on-site effluent treatment containing hazardous substances
06 06	wastes from the MFSU of sulphur chemicals, sulphur chemical processes and desulphurisation processes
06 06 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment

Table S2.4	Permitted waste types and quantities for anaerobic digestion (Group C)
Maximum Quantity	Annual throughput of waste at the site (aggregated for all activities) shall not exceed: 430,000 tonnes of non-hazardous waste; and 34,750 tonnes of hazardous waste. (These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)
Waste code	Description
06 10	wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture
06 10 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
06 13	wastes from inorganic chemical processes not otherwise specified
06 13 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
07	Wastes from organic chemical processes
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
07 01 04*	other organic solvents, washing liquids and mother liquors
07 01 08*	other still bottoms and reaction residues
07 01 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres
07 02 01*	aqueous washing liquids and mother liquors
07 02 04*	other organic solvents, washing liquids and mother liquors
07 02 08*	other still bottoms and reaction residues
07 02 11*	sludges from on-site effluent treatment containing hazardous substances
07 02 12	sludges from on-site effluent treatment other than those mentioned in 07 02 11
07 02 14*	wastes from additives containing hazardous substances
07 02 15	wastes from additives other than those mentioned in 07 02 14
07 02 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
07 03	wastes from the MFSU of organic dyes and pigments (except 06 11)
07 03 01*	aqueous washing liquids and mother liquors
07 03 04*	other organic solvents, washing liquids and mother liquors
07 03 08*	other still bottoms and reaction residues
07 03 11*	sludges from on-site effluent treatment containing hazardous substances
07 03 12	sludges from on-site effluent treatment other than those mentioned in 07 03 11
07 03 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment

Maximum Quantity	Annual throughput of waste at the site (aggregated for all activities) shall not exceed: 430,000 tonnes of non-hazardous waste; and
-	34,750 tonnes of hazardous waste.
	(These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)
Waste code	Description
07 04	wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides
07 04 01*	aqueous washing liquids and mother liquors
07 04 04*	other organic solvents, washing liquids and mother liquors
07 04 08*	other still bottoms and reaction residues
07 04 11*	sludges from on-site effluent treatment containing hazardous substances
07 04 12	sludges from on-site effluent treatment other than those mentioned in 07 04 11
07 04 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment
07 05	wastes from the MFSU of pharmaceuticals
07 05 01*	aqueous washing liquids and mother liquors
07 05 04*	other organic solvents, washing liquids and mother liquors
07 05 08*	other still bottoms and reaction residues
07 05 11*	sludges from on-site effluent treatment containing hazardous substances
07 05 12	sludges from on-site effluent treatment other than those mentioned in 07 05 11
07 05 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment e.g. Materials unsuitable for sale
07 06	wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
07 06 01*	aqueous washing liquids and mother liquors
07 06 04*	other organic solvents, washing liquids and mother liquors
07 06 08*	other still bottoms and reaction residues
07 06 11*	sludges from on-site effluent treatment containing hazardous substances
07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11
07 06 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment e.g. Materials unsuitable for sale
07 07	wastes from the MFSU of fine chemicals and chemical products not otherwise specified
07 07 01*	aqueous washing liquids and mother liquors
07 07 04*	other organic solvents, washing liquids and mother liquors
07 07 08*	other still bottoms and reaction residues
07 07 11*	sludges from on-site effluent treatment containing hazardous substances
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11
07 07 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment

Table S2.4 Permitted waste types and quantities for anaerobic digestion (Group C)		
Annual throughput of waste at the site (aggregated for all activities) shall not exceed: 430,000 tonnes of non-hazardous waste; and 34,750 tonnes of hazardous waste. (These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)		
Description		
Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks		
wastes from MFSU and removal of paint and varnish		
waste paint and varnish other than those mentioned in 08 01 11		
sludges from paint or varnish other than those mentioned in 08 01 13		
aqueous sludges containing paint or varnish other than those mentioned in 08 01 15		
wastes from paint or varnish removal other than those mentioned in 08 01 17		
aqueous suspensions containing paint or varnish containing organic solvents or other hazardous substances		
aqueous suspensions containing paint or varnish other than those mentioned in 08 01 19		
wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment		
wastes from MFSU of printing inks		
waste ink containing hazardous substances		
waste ink other than those mentioned in 08 03 12		
wastes from MFSU of adhesives and sealants (including water proofing products)		
aqueous sludges containing adhesives or sealants containing organic solvents or other hazardous substances		
aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13		
aqueous liquid waste containing adhesives or sealants containing organic solvents or other hazardous substances		
aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15		
Wastes from thermal processes		
wastes from the iron and steel industry		
wastes from cooling-water treatment containing oil		
wastes from cooling-water treatment other than those mentioned in 10 02 11		
wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment		
wastes from manufacture of cement, lime and plaster and articles and products made from them		
wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment		

Table S2.4	Table S2.4 Permitted waste types and quantities for anaerobic digestion (Group C)		
Maximum Quantity	Annual throughput of waste at the site (aggregated for all activities) shall not exceed: 430,000 tonnes of non-hazardous waste; and 34,750 tonnes of hazardous waste. (These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)		
Waste code	Description		
11	Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy		
11 01	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)		
11 01 12	aqueous rinsing liquids other than those mentioned in 11 01 11		
13	Oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19)		
13 01	waste hydraulic oils		
13 01 12*	readily biodegradable hydraulic oils		
13 03	waste insulating and heat transmission oils		
13 03 09*	readily biodegradable insulating and heat transmission oils		
16	Wastes not otherwise specified in the list		
16 05	gases in pressure containers and discarded chemicals		
16 05 08*	discarded organic chemicals consisting of or containing hazardous substances		
16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08		
16 07	wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)		
16 07 09*	wastes containing other hazardous substances		
16 07 99	wastes not otherwise specified – Washwaters not containing substances at levels that will inhibit biological treatment		
16 10	aqueous liquid wastes destined for off-site treatment		
16 10 01*	aqueous liquid wastes containing hazardous substances		
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01		
16 10 03*	aqueous concentrates containing hazardous substances		
16 10 04	aqueous concentrates other than those mentioned in 16 10 03		
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 01	wastes from incineration or pyrolysis of waste		
19 01 06*	aqueous liquid wastes from gas treatment and other aqueous liquid wastes		
19 01 99	wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment		
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)		
19 02 03	premixed wastes composed only of non-hazardous wastes		
19 02 04*	premixed wastes composed of at least one hazardous waste		
19 02 05*	sludges from physico/chemical treatment containing hazardous substances		

Table S2.4 Permitted waste types and quantities for anaerobic digestion (Group C)		
Annual throughput of waste at the site (aggregated for all activities) shall not exceed: 430,000 tonnes of non-hazardous waste; and 34,750 tonnes of hazardous waste. (These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)		
Description		
sludges from physico/chemical treatment other than those mentioned in 19 02 05		
combustible wastes other than those mentioned in 19 02 08 and 19 02 09		
wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment		
wastes from aerobic treatment of solid wastes		
non-composted fraction of municipal and similar wastes		
non-composted fraction of animal and vegetable waste		
off-specification compost		
wastes from anaerobic treatment of waste		
liquor from anaerobic treatment of municipal waste		
digestate from anaerobic treatment of municipal waste		
liquor from anaerobic treatment of animal and vegetable waste		
digestate from anaerobic treatment of animal and vegetable waste		
wastes from waste water treatment plants not otherwise specified		
wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment		
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		
wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified		
combustible waste (refuse derived fuel)		
other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances		
other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11		
wastes from soil and groundwater remediation		
sludges from soil remediation containing hazardous substances		
sludges from soil remediation other than those mentioned in 19 13 03		
sludges from groundwater remediation containing hazardous substances		
sludges from groundwater remediation other than those mentioned in 19 13 05		
aqueous liquid wastes and aqueous concentrates from groundwater remediation containing hazardous substances		
aqueous liquid wastes and aqueous concentrates from groundwater remediation other than those mentioned in 19 13 07		

Table S2.4 Permitted waste types and quantities for anaerobic digestion (Group C)		
Maximum Quantity	Annual throughput of waste at the site (aggregated for all activities) shall not exceed: 430,000 tonnes of non-hazardous waste; and	
	34,750 tonnes of hazardous waste.	
	(These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works)	
Waste code	Description	
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	
20 01	separately collected fractions (except 15 01)	
20 01 99	other fractions not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment	
20 03	other municipal wastes	
20 03 02	waste from markets	
20 03 03	street-cleaning residues	
20 03 99	municipal wastes not otherwise specified – Aqueous process waters and washwaters not containing substances at levels that will inhibit biological treatment	

Table S2.5 Permitted waste types and quantities for dewatering of digested sludge					
Maximum Quantity	Annual throughput of waste at the site (aggregated for all activities) shall not exceed 430,000 tonnes of non-hazardous waste.				
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 08	wastes from waste water treatment plants not otherwise specified				
19 08 05	sludges from treatment of urban waste water				
19 08 05 19 06	sludges from treatment of urban waste water wastes from anaerobic treatment of waste				
19 06	wastes from anaerobic treatment of waste				

Schedule 3 – Emissions and monitoring

Emission	Source	Parameter	Limit	Reference	Monitoring	Monitoring
point ref. & location			(including unit)	period	frequency	standard or method
A1 as shown on site plan in Schedule 7	CHP engine 1 [note 1]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	500 mg/m ³	Hourly average	Annual	BS EN 14792
		Sulphur dioxide	350 mg/m ³			BS EN 14791
		Carbon monoxide	1,400 mg/m ³			BS EN 15058
		Total VOCs	1,000 mg/m ³			BS EN 12619:2013
A2 as shown on site plan in Schedule 7	CHP engine 2 [note 1]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	500 mg/m ³	Hourly average	Annual	BS EN 14792
		Sulphur dioxide	350 mg/m ³			BS EN 14791
		Carbon monoxide	1,400 mg/m ³			BS EN 15058
		Total VOCs	1,000 mg/m ³			BS EN 12619:2013
A3 as shown on site plan in schedule 7	Auxiliary Boiler 1	No parameter set				
A4 as shown on site plan in schedule 7	Auxiliary Boiler 2	No parameter set				
A5 as shown on site plan in schedule 7	Auxiliary Boiler 3	No parameter set				
A6 as shown on site plan in Schedule 7	Auxiliary flare [note 2]	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	150 mg/m ³	Hourly average	[Note 3]	BS EN 14792
		Carbon monoxide	50 mg/m ³			BS EN 15058
		Total VOCs	10 mg/m ³			BS EN 12619:2013

Table S3.1 Point source emissions to air – emission limits and monitoring requirements							
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method	
Odour control units (OCU)	Granular activated carbon OCU	No parameter set					
Pressure relief valves	Digesters and digestate storage tanks	No parameter set			Record of operating hours or as otherwise agreed in writing with the Environment Agency		
Vents from tank(s)	Oil/Fuel Storage tank(s)	No parameter set	No limit set				

Note 1 – These limits are based on normal operating conditions and load – temperature 0°C (273K); pressure: 101.3 kPa and oxygen: 5 per cent (dry gas). The measurement uncertainty specified in LFTGN08 v2 2010 shall apply.

Note 2 – These limits are based on normal operating conditions and load – temperature 0°C (273K); pressure: 101.3 kPa and oxygen: 3 per cent (dry gas). The measurement uncertainty specified in LFTGN05 v2 2010 shall apply.

Note 3 – 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.

Table S3.2 Process monitoring requirements						
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications		
Biogas from digesters	Flow	Continuous	In accordance with EU weights and measures Regulations or as otherwise agreed in writing with the Environment Agency			
	Methane	Continuous	None specified	Gas monitors to be calibrated in accordance with manufacturer's recommendations		
	Hydrogen sulphide	Continuous	None specified			
Waste reception building; Digesters and storage tanks	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary		

Table S3.2 Process monitoring requirements						
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications		
Granular activated carbon odour control units (OCU)	Key process parameters to include pH, temperature and air flow	In accordance with manufacturer's recommendations.	None specified	OCUs shall be regularly checked and maintained to ensure appropriate temperature and moisture content. OCUs to be replaced when saturated in accordance with manufacturer's recommendations.		
Digester and storage tanks	Integrity checks	Weekly	Visual assessment			

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data						
Parameter Emission or monitoring period Period begins point/reference						
Emissions to air	A1, A2, A6	Every 12 months	1 January			
Parameters as required by condition 3.5.1.						

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

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

Table S4.4 Reporting forms						
Media/parameter	Reporting format	Date of form				
Air	Form Air1 or other form as agreed in writing by the Environment Agency	15/03/17				
Water usage	Form WaterUsage1 or other form as agreed in writing by the Environment Agency	15/03/17				
Energy usage	Form Energy1 or other form as agreed in writing by the Environment Agency	15/03/17				
Other performance indicators	Form Performance1 or other form as agreed in writing by the Environment Agency	15/03/17				
Waste returns	E-waste Return Form					

Schedule 5 - Notification

These pages outline the information that the operator must provide.

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

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

Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	
	any malfunction, breakdown or failure of equipment or techniques, ince not controlled by an emission limit which has caused, is pollution
To be notified within 24 hours of	detection
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	
(b) Notification requirements for t	the breach of a limit
To be notified within 24 hours of	detection unless otherwise specified below
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

(b) Notification requirements for the	breach of a limit	
To be notified within 24 hours of de	tection unless otherwise s	specified below
Measures taken, or intended to be taken, to stop the emission		
Time periods for notification following	detection of a breach of a lir	nit
Parameter		Notification period
(c) Notification requirements for the	detection of any significa	unt adverse environmental effect
To be notified within 24 hours of de		
Description of where the effect on	· · · · · · · · · · · · · · · · · · ·	
the environment was detected		
Substances(s) detected	_	
Concentrations of substances detected		
Date of monitoring/sampling		
Any more accurate information on the notification under Part A.	matters for	acticable
Measures taken, or intended to be taken a recurrence of the incident	en, to prevent	
Measures taken, or intended to be take limit or prevent any pollution of the envi which has been or may be caused by	vironment	
The dates of any unauthorised emission facility in the preceding 24 months.	ons from the	
Name*		
Post		
Signature		
Date		

^{*} authorised to sign on behalf of the operator

Schedule 6 – Interpretation

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

"ADQP" means Anaerobic Digestion Quality Protocol

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

"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.

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

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

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

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

"emissions to land" includes emissions to groundwater.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

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

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

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

"Industry Standard Protocol" means "A standardised protocol for the monitoring of bioaerosols at open composting facilities" published by the Association for Organics Recycling and developed in conjunction with the Environment Agency.

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

"pests" means Birds, Vermin and Insects.

"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.

"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.

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

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

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

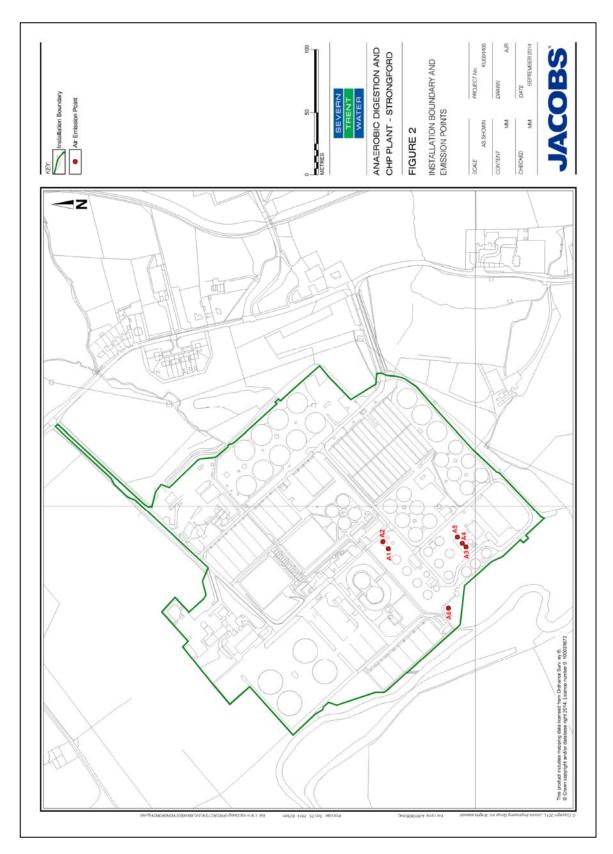
"year" means calendar year ending 31 December.

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, 3% or 5% for 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.

Schedule 7 – Site plan



END OF PERMIT

Permit Number: EPR/MP3097FY Operator: Severn Trent Water Limited

Facility: Strongford Sewage Form Number: Air1/15/03/17

Treatment Works

Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance/Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A1	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	500 mg/m ³	1 hour period		BS EN 14792		
A1	Sulphur dioxide	350 mg/m ³	1 hour period		BS EN 14791		
A1	Carbon monoxide	1400 mg/m ³	1 hour period		BS EN 15058		
A1	Total VOCs	1000 mg/m ³	1 hour period		BS EN 12619:2013		
A2	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	500 mg/m ³	1 hour period		BS EN 14792		
A2	Sulphur dioxide	350 mg/m ³	1 hour period		BS EN 14791		
A2	Carbon monoxide	1400 mg/m ³	1 hour period		BS EN 15058		
A2	Total VOCs	1000 mg/m ³	1 hour period		BS EN 12619:2013		
A6	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	150 mg/m ³	1 hour period		BS EN 14792		
A6	Carbon monoxide	50 mg/m ³	1 hour period		BS EN 15058		
A6	Total VOCs	10 mg/m ³	1 hour period		BS EN 12619:2013		

- [1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum maximum' measured values.

 [2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
- [3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- [4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed	Date
(Authorised to sign as representative of Operator)	

Permit Number:	EPR/MP3097FY	1	Operator:	Severn Trent Water Limited
Facility:	Strongford Sev Treatment Wor	_	Form Number: WaterUsage1/15/03/17	
Reporting of Wate	r Usage for the yea	ar		
Water Source		Usage (m3/year)		Specific Usage (m3/unit output)
Mains water				
Site borehole				
River abstraction				
TOTAL WATER USAGE				
Operator's comments:				
Signed(authorised to sign as rep			Date	

Permit number EPR/MP3097FY

Permit Number:	EPR/MP3097FY	Operator:	Severn Trent Wa	ater Limited	
Facility:	Strongford Sewage Treatment Works	Form Number	Form Number: Energy1/15/03/17		
Reporting of Energ	gy Usage for the year				
Energy Source	Energy Usage		Specific	Usage (MWh/unit output)	
	Quantity	Primary Energy (MWh)		
Electricity *	MWh				
Biogas	tonnes or m ³				
Biomethane	tonnes or m ³				
Natural Gas	MWh				
Recovered Fuel Oil	tonnes				
Gas Oil	tonnes				
TOTAL	-				
* Conversion factor for de	elivered electricity to primary energy = 2	2.4			
Operator's comments:					
L					
Signed		Date			
(Authorised to sign as re	presentative of Operator)				

Permit Number:	EPR/MP3097FY	Operator:	Severn Trent Water Limited
Facility:	Strongford Sewage Treatment Works	Form Number: Performance1/15/03/17	
Reporting of other	performance indicators for the pe	eriod DD/MM/YYY	Y to DD/MM/YYYY
Parameter			Units
Total raw material used			tonnes
CHP engine usage			hours
CHP engine efficiency			%
Auxiliary flare operation			hours
Electricity exported			MWh
Auxiliary boiler usage			hours
Operator's comments:			
Signed	oresentative of Operator)	Date	
(, tallionous to digit do to)	sissistically		