



Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Urbaser Environmental Limited

Courtauld Road Waste Treatment Facility
Courtauld Road
Basildon
Essex
SS13 1FL

Variation application number

EPR/AP3138CM/V003

Permit number

EPR/AP3138CM

Courtauld Road Waste Treatment Facility

Permit number EPR/AP3138CM

Introductory note

This introductory note does not form a part of the notice

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

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

The Courtauld Road Waste Treatment Facility, operated by Urbaser Environmental Limited, is a mechanical and biological treatment plant (MBT) for the treatment of non-hazardous, residual municipal and commercial and industrial solid waste including bulky waste, street sweepings and waste from household waste recycling centres. The MBT facility is permitted to accept up to 420,000 tonnes of waste per year.

This variation authorises the addition of a new process on site, this is the production of Quick Solid Recovered Fuel (QSRF). This process will be undertaken as a listed activity under the Environmental Permitting Regulations (EPR) as:

Section 5.4 A (1) (a) (ii) – disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving physico-chemical treatment, and excluding activities covered by Council Directive 91/271/EEC concerning urban waste water treatment.

As a result of this variation, the facility will now comprise of the following 4 processes:

Pre-Processing

Pre-processing allows for the recovery of recyclable material (such as metals, plastics, paper and card) from the residual waste stream with the fine organic fraction being passed through to the biostabilisation phase and certain wastes with low biodegradable content transferred to the QSRF line.

Biostabilisation

The biostabilisation process is for the treatment of waste under aerobic conditions. Each of the three biostabilisation halls has its own piling system. An automatic bucket wheel is fitted in each hall, to perform periodic turning cycles on the piles. The biostabilisation process lasts for six to seven weeks and the process controls air circulation and moisture levels to ensure aerobic conditions are maintained.

Refining

After six to seven weeks, the treated waste will be either a stabilised output material (SOM) for disposal to landfill or a solid recovered fuel (SRF) for combustion off site. The waste is then subject to a refining process which involves the screening of the outputs into different sized materials dependant on the end use.

Production of quick solid recovered fuel (QSRF)

After recyclable material recovery, which takes place during the pre-processing stage, certain waste streams with low biodegradable content will be transferred via conveyor to be shredded within the waste reception area and subsequently bulked for transfer off – site as QSRF. The QSRF will be capable of meeting the non-hazardous landfill waste acceptance criteria.

All other ancillary activities on site remain the same.

All waste reception, storage and treatment areas are within buildings to reduce the risk of fugitive emissions of dust, odour, litter, noise and pests. An air treatment system keeps the buildings under negative pressure, and routes the air from within through an acid scrubber to remove ammonia and a biofilter designed to biodegrade odorous and other volatile organic compounds. The treated air is then discharged through a 20.5 m high stack.

A Membrane Bioreactor (MBR) treatment plant will treat any excess liquid leachate generated. The treated effluent water produced by the treatment plant will be re-used in activities in various parts of the facility. Excess treated leachate will be discharged to foul sewer.

The facility will also undertake rainwater harvesting of roof run-off and surface water from external areas to minimise mains water use. Excess uncontaminated water will be discharged to Nevenden Bushes Brook via an interceptor and balancing pond.

The schedules specify the changes made to the permit.

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

Status log of the permit		
Description	Date	Comments
Application EPR/AP3138CM/A001	Duly made 01/06/2012	-
Additional information received following Schedule 5 Notice dated 14/08/2012	21/09/2012	-
Additional information received following Schedule 5 Notice dated 17/08/2012	21/09/2012	-
Additional information received following email dated 30/10/2012	07/11/2012	-
Additional information received	02/01/2013	Confirmation of planning permission
Permit EPR/AP3138CM determined	01/03/2013	-
Notified of change of registered office address	19/10/2015	Registered office address changed to First Floor, Westmoreland House, 80-86 Bath Road, Cheltenham, Gloucestershire, GL53 7JT
Application EPR/AP3138CM/V003 (variation and consolidation)	Duly made 25/07/2017	Application to vary the permit and add a new listed activity, and update the permit to modern conditions.
Additional information received	25/07/2017	Response to request for further information consisting a revised OPRA, updated Part A form and fugitive emissions risk assessment and management plan.
Schedule 5 notice response received	11/10/2017	Responses to questions 1 to 17 of the notice in relation to the fire prevention plan (FPP) and waste codes for the new activity.

Status log of the permit		
Description	Date	Comments
Variation determined EPR/AP3138CM/V003 (Billing ref: VP3034YZ)	16/11/2017	Varied and consolidated permit issued.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

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

Permit number

EPR/AP3138CM

Issued to

Urbaser Environmental Limited (“the operator”)

whose registered office is

**First Floor
Westmoreland House
80 - 86 Bath Road
Cheltenham
Gloucestershire
GL53 7JT**

company registration number 07888606

to operate a regulated facility at

**Courtauld Road Waste Treatment Facility
Courtauld Road
Basildon
Essex
SS13 1FL**

to the extent set out in the schedules.

The notice shall take effect from 16/11/17

Name	Date
Mike Jenkins	16/11/2017

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit EPR/AP3138CM.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/AP3138CM

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/AP3138CM/V003 authorising,

Urbaser Environmental Limited (“the operator”),

whose registered office is

**First Floor
Westmoreland House
80 - 86 Bath Road
Cheltenham
Gloucestershire
GL53 7JT**

company registration number 07888606

to operate an installation at

**Courtauld Road Waste Treatment Facility
Courtauld Road
Basildon
Essex
SS13 1FL**

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

Name	Date
Mike Jenkins	16/11/2017

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.

1.2 Energy efficiency

1.2.1 The operator shall:

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

1.3 Efficient use of raw materials

1.3.1 The operator shall:

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

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

1.4.1 The operator shall take appropriate measures to ensure that:

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

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

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).
- 2.1.2 Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

2.2 The site

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

2.3 Operating techniques

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

3 Emissions and monitoring

3.1 Emissions to water, air or land

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

3.2 Emissions of substances not controlled by emission limits

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

3.3 Odour

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

3.4 Noise and vibration

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

specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;

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

3.5 Bioaerosols

3.5.1 The operator shall take all appropriate measures, to prevent or where that is not practicable to minimise the release of bioaerosols. Emissions of bioaerosols from the operational activities shall not exceed the emission threshold limits specified in tables S3.5 and S3.6.

3.5.2 The operator shall where the emission threshold limits are exceeded:

- (a) notify the Environment Agency and investigate and take remedial action;
- (b) submit to the Environment Agency for approval within the period specified, a bioaerosols management plan which identifies and minimises the risks of pollution from bioaerosols; and
- (c) implement the bioaerosols management plan from the date of approval and revise the plan periodically, unless otherwise agreed in writing by the Environment Agency.

3.6 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.

3.7 Fire prevention

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

3.8 Monitoring

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

- (a) point source emissions specified in tables S3.1, S3.2 and S3.3;
- (b) process monitoring specified in table S3.4;
- (c) bioaerosols monitoring specified in table S3.5 and S3.6

3.8.2 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.

3.8.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.8.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

3.8.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2, S3.3, S3.4, S3.5 and S3.6 unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

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

4.2 Reporting

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

assessment of the efficiency to reduce odours, the summary of maintenance and any re-commissioning planned or conducted, assessment of back pressure, venting and cracking. Thereafter the operator shall submit the report within one month of the end of each year, unless otherwise agreed in writing by the Environment Agency.

4.3 Notifications

4.3.1 In the event:

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

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

4.3.3 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.

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

Where the operator is a registered company:

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

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

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

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and

- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.5 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.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made “immediately”, in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
AR1	S5.4 A(1) (b) (i)	Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving biological treatment	<p>Biostabilisation of wastes in the maturation halls. Including storage and processing of output materials as Directly Associated Activities.</p> <p>Waste types as specified in Table S2.2.</p> <p>All activities shall be undertaken within a building that is maintained under negative pressure.</p> <p>All activities shall be undertaken within a building with an impermeable surface and sealed drainage system.</p> <p>No more than 9,000m³ of waste to be stored within the waste reception bunkers at any one time.</p>
AR2	Section 5.4 A(1)(b)(i)	Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving biological treatment.	<p>Treatment of excess leachate from the facility using Membrane Bioreactor (MBR).</p> <p>From leachate collection to storage prior to disposal.</p> <p>Including discharge of treated leachate to sewer or for reuse on site and storage of sludge as Directly Associated Activities.</p>

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
AR3	Section 5.4 A (1) (a) (ii)	Disposal of non – hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving physico-chemical treatment, and excluding activities covered by Council Directive 91/271/EEC concerning urban waste water treatment.	<p>Production of quick solid recovered fuel (QSRF) in an enclosed building maintained under negative pressure.</p> <p>All activities shall be undertaken within a building with an impermeable surface and sealed drainage system.</p> <p>Waste types as specified in Table S2.3.</p> <p>No more than 115,000 tonnes of QSRF to be produced on site per annum.</p>
Directly Associated Activity			
AR4	Storage of waste pending recovery or disposal.	R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).	<p>Undertaken in relation to Activity AR1, AR2 and AR3.</p> <p>From the receipt of waste to despatch for treatment or despatch off site for disposal.</p> <p>Storage of waste in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with sealed drainage system.</p> <p>Waste types suitable for acceptance are limited to those specified in Tables S2.2 and S2.3.</p>
AR5	Pre-treatment of waste.	R3: Recycling/reclamation of organic substances which are not used as solvents	Treatment consisting only of manual sorting, separation, screening, baling, shredding and compaction.

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
		<p>R4: Recycling/reclamation of metals and metal compounds</p> <p>R5: Recycling/reclamation of other inorganic compounds</p> <p>R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).</p>	<p>From waste reception to submission of the waste to the biostabilisation process; including storage and dispatch of recyclable materials and other segregated wastes.</p> <p>All activities shall be undertaken within a building that is maintained under negative pressure.</p> <p>All activities shall be undertaken within a building with an impermeable surface and sealed drainage system.</p> <p>Waste types suitable for acceptance are limited to those specified in Tables S2.2 and S2.3.</p>
AR6	Raw material storage	Storage of raw materials for use at the facility	From the receipt of raw materials to despatch for use within the facility.
AR7	Air treatment	Treatment of air from the facility buildings using acid scrubbers and biofilters prior to discharge through the stack.	Air drawn from the buildings to maintain negative pressure shall be ultimately discharged through the air treatment system.
AR8	Backup generator	Backup generator for emergency use.	--
AR9	Surface water management	Collection and reuse or disposal of uncontaminated surface water.	Discharge to Nevenden Bushes Brook.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Environmental Permit Application EPR/AP3138CM/A001 Amended Submission May 2012 dated 29/05/2012 in response to parts B2 and B3 of the application form. Excluding: Section 4 – Impact on the environment; Annex C – Odour Management Plan.	01/06/2012
Response to Schedule 5 Notice dated 14/08/2012	Responses to questions 1 to 11	21/09/2012
Response to Schedule 5 Notice dated 17/08/2012	Responses to questions 1 to 16	21/09/2012
Request for additional information (email dated 25/10/2012)	Responses to questions 1 to 7 Excluding: Response 7	07/11/2012
Further information received	Final planning permission	02/01/2013
Application Variation EPR/AP3138CM/V003	Response to question on form C3, Question 3a (operating techniques)	25/10/2017
Response to Schedule 5 notice dated 19/09/2017	Responses to questions 1 – 16 of the notice in relation to the Fire Prevention Plan (FPP)	11/10/2017

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	The Operator shall submit a written report to the Environment Agency on the commissioning of the installation. The report shall summarise the environmental performance of the plant as installed against the design parameters set out in the Application. The report shall also include a review of the performance of the facility against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions.	16/02/18
IC2	The operator shall review the results of 12 months of bioaerosols monitoring undertaken both from the biofilter stack A1 and the ambient locations as stipulated in tables S3.5 and S3.6 of this permit (formerly S3.1 and S3.4). The review shall include an assessment of the validity of the qualitative bioaerosols risk assessment provided with the permit application when compared with actual results obtained during such monitoring, and shall propose emission limit values for total bacteria and <i>Aspergillus fumigatus</i> emitted from the biofilter stack.	16/03/18

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<p>A written summary report of the findings of this review shall be provided to the Environment Agency. The notification requirements of condition 2.4.2 will be deemed to have been complied with on submission of the summary report. The emission limits for the biofilter stack are to be agreed in writing by the Environment Agency.</p> <p>If the review demonstrates that the qualitative risk assessment does not remain valid, the operator shall submit proposals for a quantitative risk assessment (and proposed timetable for its implementation) to the Environment Agency for approval in writing.</p> <p>The operator shall undertake the quantitative risk assessment as approved, and from the date stipulated by the Environment Agency.</p>	
IC3	<p>The Operator shall carry out a noise assessment for installation in accordance with the requirements of BS4142: 1997 – Method for Rating Industrial Noise affecting mixed Residential and Industrial Areas. The assessment shall include the impact of operations during day-time and night-time periods, in comparison with the estimated noise impact within the permit application. A written report, summarising the outcome of the assessment, including a timetable for the implementation of any improvements identified, shall be submitted to the Environment Agency.</p>	16/02/18

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
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Table S2.2 Permitted waste types and quantities for Activity AR1	
Maximum quantity	The total annual throughput in Tables S2.2 and S2.3 shall not exceed 420,000 tonnes per year.
Exclusions	Wastes having any of the following characteristics shall not be accepted: <ul style="list-style-type: none"> - consisting solely or mainly of dusts (except sawdust), powders, or loose fibres - wastes containing treated wood, wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed - sludges (except gully and street cleaning wastes) - drummed wastes
Waste code	Description
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 03	plant-tissue waste
02 01 07	wastes from forestry
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 04	materials unsuitable for consumption or processing
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 06 02	wastes from preserving agents
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
02 07 04	materials unsuitable for consumption or processing
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 01	waste bark and wood
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard

03 03 08	wastes from sorting of paper and cardboard destined for recycling
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
15 01 02	plastic packaging
15 01 04	metallic packaging
15 01 06	mixed packaging
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard
20 01 08	biodegradable kitchen and canteen waste
20 01 39	plastics
20 01 40	metals
20 01 99	other fractions not otherwise specified (separately collected dog faeces only)
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
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 07	bulky waste

Table S2.3 Permitted waste types and quantities for Activity AR3	
Maximum quantity	The total annual throughput in Tables S2.2 and S2.3 shall not exceed 420,000 tonnes per year.
Exclusions	Wastes having any of the following characteristics shall not be accepted: <ul style="list-style-type: none"> - consisting solely or mainly of dusts (except sawdust), powders, or loose fibres - wastes containing treated wood, wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed - sludges (except gully and street cleaning wastes) - drummed wastes
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 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPERATELY COLLECTED FRACTION
20 03	other municipal wastes
20 03 01	mixed municipal waste
20 03 07	bulky waste

Schedule 3 – Emissions and monitoring

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [Point A1 on site plan in schedule 7]	Biofilter stack	Odour	No limit set	Determined in accordance with BS EN 13725:2003 for Dynamic Dilution Olfactometry	Quarterly for the first year of operation Thereafter at a frequency to be agreed in writing by the Environment Agency	BS EN 13725: 2003
A2 [Point A2 on site plan in schedule 7]	Back up diesel generator	No parameter set	No limit set	--	--	--

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 on site plan in schedule 7 – Emission to Nevendon Bushes Brook	Uncontaminated site source water from roofs and non-operational areas	No parameter set	No limit set	--	--	--

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 on site plan in schedule 7 – Emission to Basildon Sewage Treatment Plant	Effluent Treatment Plant	No parameter set	No limit set	--	--	--

Table S3.4 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Biofilter	Temperature	As required	Temperature probe	Biofilter shall be regularly checked and maintained to ensure appropriate temperature and moisture content. In accordance with the agreed OMP.
	Moisture	As required	None specified	
	Thatching/compaction	As required	None specified	
Scrubber system	Key process operating parameters to include as a minimum pH.	In accordance with the agreed OMP.	None specified	Scrubber system shall be regularly checked and maintained to ensure appropriate pH.
Inlet air to biofilter system	Total odour	Quarterly for the first year of operation, then at a frequency to be agreed by the Environment Agency.	BS EN 13725:2003	Results to be reported in ouE/m ³

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

Table S3.6 Bioaerosols monitoring requirements – point and area sources					
Location or description of point of measurement	Parameter	Bioaerosols threshold limits (CFU m⁻³)	Monitoring frequency	Monitoring standard or method	Other specifications
Biofilter (stack)	Total bacteria	[note 1]	Quarterly for the first year of operation and twice a year thereafter, unless another frequency is agreed in writing by the Environment Agency	In accordance with Technical Guidance Note M9 – Environmental monitoring of bioaerosols at regulated facilities.	As described in the Technical Guidance Note M9, including all the additional data requirements specified therein.
	Aspergillus Fumigatus	[note 1]			
Note 1 – Emission limits to be set on completion of Improvement Condition 2.					

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.8.1.	A1	Every 12 months	1 January
Bioaerosols monitoring Parameters as required by condition 3.8.1	As specified in schedule 3 tables S3.5 and S3.6	Every 3 months or as agreed in writing by the Environment Agency	1 January, 1 April, 1 July, 1 October
Process monitoring as required by condition 3.8.1	Biofilter and scrubber	Every 12 months	1 January

Table S4.2 Annual production/treatment	
Parameter	Units
Stabilised output material	tonnes or m ³
Solid recovered fuel	tonnes or m ³
Quick solid recovered fuel	tonnes or m ³

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes or m ³
Energy usage	Annually	MWh
Raw material usage	Annually	tonnes or m ³

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Environment Agency	16/11/17
Bioaerosols	As specified in the Technical Guidance Note M9 or other form as agreed in writing by the Environment Agency	16/11/17
Process monitoring	Form process monitoring 1 or other form as agreed in writing by the Environment Agency	16/11/17
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	16/11/17

Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

Part A

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

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

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

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

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

Part B – to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

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

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

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

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

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

“bioaerosols threshold limits” means the maximum acceptable bioaerosol concentrations at the nearest sensitive receptor, or at an equivalent distance downwind of the biowaste treatment operations, which are attributable to the biowaste treatment operations. The maximum acceptable concentrations are respectively 1000 and 500 CFU m⁻³ for total bacteria and *Aspergillus fumigatus*.

“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 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“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.

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

Permit Number: EPR/AP3138CM Operator: Urbaser
Facility: Courtauld Road Waste Treatment Facility Form Number: Environmental Limited
Air1 / 16/11/17

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	Odour	No limit set	Determined in accordance with BS EN 1375 : 2003 for Dynamic Dilution Olfactometry		BS EN 1375 : 2003		

[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/AP3138CM

**Operator: Urbaser Environmental
Limited**

Facility: Courtauld Road Waste Treatment Facility

**Form Number:
WaterUsage1 / 16/11/17**

Reporting of Water Usage for the year

Water Source	Usage (m3/year)	Specific Usage (m3/unit output)
Mains water		
Site borehole		
River abstraction		
TOTAL WATER USAGE		

Operator's comments:

Signed

Date.....

(authorised to sign as representative of Operator)

Permit Number: EPR/AP3138CM

Operator:

**Urbaser
Environmental
Limited**

Facility: Courtauld Road Waste Treatment Facility

Form Number:

Energy1 / 16/11/17

Reporting of Energy Usage for the year

Energy Source	Energy Usage		Specific Usage (MWh/unit output)
	Quantity	Primary Energy (MWh)	
Electricity *	MWh		
Natural Gas	MWh		
Gas Oil	tonnes		
Recovered Fuel Oil	tonnes		
Biogas	tonnes		
TOTAL	-		

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments:

Signed

Date.....

Permit Number: **EPR/AP3138CM** **Operator:** **Urbaser Environmental Limited**

Facility: **Courtauld Road Waste Treatment Facility** **Form Number:** **Performance1 / 16/11/17**

Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY

Parameter	Units
Raw material usage	tonnes
Water usage	tonnes or m ³
Energy usage	MWh

Operator's comments:

Signed

Date.....