

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Biffa Leicester Limited

Wanlip Composting & Anaerobic Digestion Facility Fillingate Wanlip Leicester LE7 4PF

#### Variation application number

EPR/DB3806MD/V004

#### Permit number

EPR/DB3806MD

# Wanlip Composting & Anaerobic Digestion Facility Permit number EPR/DB3806MD

#### Introductory note

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

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

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

The Wanlip Anaerobic Digestion (AD) facility accepts up to 75,000 tonnes per year of organic waste for treatment. Residual waste is delivered to a recycling plant at Hoods Close in Leicester. Extraction processes separate the organic from the inorganic waste with the various fractions sent on for further recycling and recovery. The organic waste fraction is sent to the AD facility at Wanlip.

The extracted organic waste is mixed with water to create slurry, which is screened and filtered to remove contaminants including paper, fabrics, glass and grit. The liquid fraction is discharged into digestion tanks where it is retained for 18-20 days at about 38°C in the absence of oxygen. The resultant biogas is extracted and used to generate 1.5 MW of electricity. The digestate is dewatered and transferred to the adjacent Severn Trent facility where it is stored prior to application to land as a soil conditioner/fertiliser. The liquid fraction from the dewatering process is disposed of direct to the foul sewer at Wanlip sewage treatment works.

The operations at Wanlip are regulated via two main Environmental Permits covering the two main aspects of the operation. The reception, pre-treatment, treatment and certain aspects of post treatment are subject to this permit. The storage and utilisation of biogas are covered under Environmental Permit EPR/ZP3537PP.

The installation is sited on a minor aquifer and within a Nitrate Vulnerable Zone. The nearest sensitive receptor is Severn Trent Water Waste Water Treatment Works located adjacent to the site.

This permit variation includes an additional EWC Code, 16 03 05\* - off specification batches and unused products: organic wastes containing hazardous substances. This will allow the receipt and treatment of higher strength alcohol within the anaerobic digestion facility. This waste stream is not received from or via any other waste management facilities and is delivered to site directly from its manufacture or source.

This new waste steam is classified as hazardous waste due to its increased alcohol content and therefore a new scheduled activity is added to the permit:

S5.3 A(1) (a) (i)
 Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving biological treatment.

Existing waste storage and handling systems will be used for this new waste stream. Procedures to feed this material into the anaerobic digestion process have been developed.

There will be no significant changes to emissions from the facility or waste generation as a result of accepting this new waste stream.

The permit no longer requires the monitoring and reporting of bioaerosols and biofilter efficiency. No fire prevention plan is required in line with the template for anaerobic digestion plants.

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	
Original permit issued EAWML 43549	26/11/03	Waste management licence keeping and treatment of controlled waste on land.	
Variation issued EPR/TP3390CW/V002 (previously EAWML 43549)	01/04/09	Additional waste types added, waste throughput increased, sludge and liquid waste forms are now accepted.	
Application EPR/TP3390CW/V003 (variation)	Duly made 15/07/15	Application to add waste code 19 02 10 – Glycerine.	
Variation determined EPR/TP3390CW	02/09/15	Varied permit issued.	
Application EPR/TP3390CW/V004 (full transfer of permit to EPR/DB3806MD)	Duly made 29/09/14	Application to vary and update the permit to modern conditions in accordance with IED (EPR/TP3390CW/V004), in conjunction with application to transfer permit in full to Biffa Leicester Limited (EPR/DB3806MD/T001).	
Transfer determined EPR/DB3806MD/T001	03/03/16	Full transfer of permit complete.	
Variation determined EPR/DB3806MD	08/03/16	Varied and consolidated permit issued in modern condition format.	
Application EPR/DB3806MD/V003	Duly made 23/03/16	Application to vary permit to add waste code 19 05 02, waste from anaerobic treatment of solid wastes, non-composted fraction of animal and vegetable waste.	
Variation determined EPR/DB3806MD	10/06/16	Varied permit issued.	
Application EPR/DB3806MD/V004	Duly made 06/10/17	Application to vary permit to add waste code 16 03 05* (off specification batches and unused products – organic wastes containing hazardous substances).	
Additional information received	13/11/17 & 30/11/17	Response to Schedule 5 Notice dated 25/10/17.	
Variation determined EPR/DB3806MD/V004 (PAS Billing Ref: KP3537YA)	05/01/18	Varied permit issued to Biffa Leicester Limited.	

Other Part A installation permits relating to this installation		
Operator Permit number Date of issue		Date of issue
Biffa Leicester Limited	EPR/ZP3537PP	10/04/13

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

#### Permit number

EPR/DB3806MD

#### Issued to

Biffa Leicester Limited ("the operator")

whose registered office is

Coronation Road Cressex Business Park High Wycombe Buckinghamshire HP12 3TZ

company registration number 04602279

to operate a regulated facility at

Wanlip Composting & Anaerobic Digestion Facility Fillingate Wanlip Leicester LE7 4PF

to the extent set out in the schedules.

The notice shall take effect from 05/01/2018

Name	Date
Mike Jenkins	05/01/2018

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 2016

#### Permit number

#### EPR/DB3806MD

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/DB3806MD/V004 authorising,

Biffa Leicester Limited ("the operator"),

whose registered office is

Coronation Road Cressex Business Park High Wycombe Buckinghamshire HP12 3TZ

company registration number 04602279

to operate an installation at

LE7 4PF

Wanlip Composting & Anaerobic Digestion Facility Fillingate
Wanlip
Leicester

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

Name	Date
Mike Jenkins	05/01/2018

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 (excluding the area edged in red).

#### 2.3 Operating techniques

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

2.5.1 The operations specified in schedule 1 table S1.4 shall not commence until the measures specified in that table have been completed.

#### 3 Emissions and monitoring

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

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.

#### 3.2 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 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in tables S3.1 and S3.2;
  - (b) process monitoring specified in table S3.3
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1 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 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 S4.1; and
  - (c) the performance parameters set out in schedule 4 table S4.2 using the forms specified in table S4.3 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) for the reporting periods specified in schedule 4 table S4.1 and S4.2 and using the forms specified in schedule 4 table S4.3; and
  - (b) 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 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	S5.3 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 through to digestion and recovery of by-products (digestate).  Anaerobic digestion of waste in 3 tanks.  Waste types suitable for acceptance are limited to those hazardous wastes specified in Table S2.2.
AR2	S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment.	R3: Recycling/reclamation of organic substances which are not used as solvents	From receipt of waste through to digestion and recovery of by-products (digestate).  Anaerobic digestion of waste in 3 tanks.  Waste types suitable for acceptance are limited to those non-hazardous wastes specified in Table S2.2.
	Directly Associated Activity	/	
AR3	Storage of waste pending recovery or disposal	R13: Storage of waste pending operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced)	From the receipt of waste to despatch for anaerobic digestion or despatch off site for recovery and/or disposal.  Storage of waste in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with sealed drainage.  Waste types suitable for acceptance are limited to those specified in Table S2.2.  Maximum storage of waste is 11550 tonnes. Inert Wastes - 25 tonnes Other Wastes - 11525 tonnes. The total quantity of hazardous waste stored at any time on its own or wher mixed with /added to non-hazardous waste shall not exceed 50 tonnes.

Activity			Limits of specified
reference	1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	activity and waste types
AR4	Physical treatment for the purpose of recycling	R3: Recycling/reclamation of organic substances which are not used as solvents	From the receipt of waste to despatch for anaerobic digestion or despatch off site for recovery.
			Pre-treatment of waste in enclosed building and on impermeable surface with sealed drainage system including shredding, sorting, screening, compaction, baling, mixing and maceration.
			Post-treatment of digestate in an enclosed building and on an impermeable surface with sealed drainage system, including screening to remove contraries, centrifuge or pressing and addition of thickening agents (polymers) or drying.
			Heat treatment (pasteurisation) including hydrolysis of waste in 2 tanks for the purpose of recovery.
			Waste types suitable for acceptance are limited to those specified in Table S2.2.
AR5	Raw material storage	Storage of raw materials.	From the receipt of raw materials to despatch for use within the facility.
AR6	Gas storage	Storage of biogas produced from on-site anaerobic digestion of permitted waste in roof space of digesters.	From the receipt of biogas produced at the on-site anaerobic digestion process including delivery of biogas to the Storage Gas Tank.
		R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Operation of the Storage Gas Tank, gas engines and associated plant and equipment is regulated by a separate permit.
AR7	Digestate storage	Storage of solid digestate in an enclosed building. R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection,	From the receipt of digestate produced from the on-site anaerobic digestion process to despatch for use off-site.

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
		on the site where it is produced)	
AR8	Surface water collection and storage	Collection of uncontaminated roof and site surface water in a sump.	From the collection of uncontaminated roof and site surface water from non-operational areas only to reuse within the facility or discharge off-site.
AR9	Process water collection and storage	Collection and storage of process water in a storage tank.	From the receipt of process water produced at the facility or from off-site to despatch for treatment at the facility or despatch off site for recovery or disposal.
AR10	Air treatment	Collection and treatment of air using abatement system (biofilter, scrubber /carbon filters) prior to release to atmosphere.	From the collection of air from site processes to treatment and release of treated air to atmosphere.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Sections 1.2, 1.4, 1.6 and 1.8 of the application document in response to section 3a – technical standards , Part B of the application form	29/09/14
Application EPR/DB3806MD/V003	Supporting Statement, BF4954/03/SS (July 2017) in response to section 3a – technical standards, Part B of the application form.	10/07/17
Response to Schedule 5 Notice dated 25/10/17	Operating techniques described in the responses to the Notice (including accompanying information):  Response 1 (systems to ensure storage of waste meets	13/11/17
	tonnage limits including Standard Operating Procedure for Feeding & Alcohol Waste Dosing [WANSOP007]), Responses 2 & 3 (justification of EWC 16 03 05*) and Response 4 (risk assessment of impact of new waste stream on emissions and digestate from site).	
Response to Schedule 5 Notice dated 25/10/17	Response on management of quantities of waste in storage tank including use of SCADA control system to alarm and close input valve to prevent storage tank containing greater than 50 m³ total wastes.	30/11/17

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	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 – <i>Guidance for the Treatment of Hazardous and Non Hazardous Waste</i> . The plan shall also incorporate all the required detailed information as specified in the Environment Agency's Horizontal Guidance H4 – <i>Odour Management</i> . The plan must contain dates for implementation of individual measures.	01/08/18

Table S1.4 Pre-operational measures for future development		
Reference	Operation	Pre-operational measures
1	Storage of hazardous waste stream (EWC 16 03 05*) in waste storage tank (100 m³).	The operator shall submit a report to the Environment Agency for approval, prior to acceptance of hazardous waste into the waste storage tank on site.
		This report should demonstrate that an alarm and automatic filling shut-off valve have been installed and commissioned on this tank that prevent storage of greater than 50 m³ waste in this tank.

# Schedule 2 – Waste types, raw materials and fuels

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

Table S2.2 Permitte	d waste types and quantities for anaerobic digestion
Maximum quantity	Annual throughput shall not exceed 75,000 tonnes
	The total quantity of hazardous waste stored at any time on its own or when mixed with /added to non-hazardous waste shall not exceed 50 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted:
	<ul> <li>consisting solely or mainly of dusts (except sawdust), powders, or loose fibres;</li> <li>wastes containing treated wood, wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed;</li> <li>hazardous wastes</li> </ul>
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), effluent, collected separately and treated off-site
02 01 07	wastes from forestry
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 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 02	wastes from preserving agents
02 03 03	wastes from solvent extraction
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
02 04	wastes from sugar processing

Table S2.2 Permitte	d waste types and quantities for anaerobic digestion
Maximum quantity	Annual throughput shall not exceed 75,000 tonnes  The total quantity of hazardous waste stored at any time on its own or when mixed with /added to non-hazardous waste shall not exceed 50 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted:  - consisting solely or mainly of dusts (except sawdust), powders, or loose fibres;  - wastes containing treated wood, wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed;  - hazardous wastes
Waste code	Description
02 04 01	soil from cleaning and washing beet
02 04 03	sludges from on-site effluent treatment
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 02	wastes from preserving agents
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 03	wastes from chemical treatment
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
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 02	green liquor sludge (from recovery of cooking liquor)
03 03 05	de-inking sludges from paper 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 01	wastes from the leather and fur industry
04 01 07	sludges, in particular from on-site effluent treatment not containing chromium
04 02	wastes from the textile industry
04 02 10	organic matter from natural products, e.g. grease, wax
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres

	d waste types and quantities for anaerobic digestion
Maximum quantity	Annual throughput shall not exceed 75,000 tonnes  The total quantity of hazardous waste stored at any time on its own or when mixed with /added to non-hazardous waste shall not exceed 50 tonnes.
Exclusions	Wastes having any of the following characteristics shall not be accepted: - consisting solely or mainly of dusts (except sawdust), powders, or loose fibres; - wastes containing treated wood, wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed; - hazardous wastes
Waste code	Description
16	Wastes not otherwise specified in the list
16 03	off-specification batches and unused products
16 03 05*	organic wastes containing hazardous substances
16 03 06	organic wastes other than those mentioned in 16 03 05
16 10	aqueous liquid wastes destined for off-site treatment
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01
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 02	wastes from physico/chemical treatments of waste (including dechromatation decyanidation, neutralisation)
19 02 10	glycerine only
19 05	wastes from aerobic treatment of solid wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 06	wastes from anaerobic treatment of waste
19 06 03	liquor from anaerobic treatment of municipal waste (from a process that treats wastes which are listed in this table only)
19 06 04	digestate from anaerobic treatment of municipal waste
19 06 05	liquor from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table only)
19 06 06	digestate from anaerobic treatment of animal and vegetable waste (from a process that treats wastes which are listed in this table only)
19 08	wastes from waste water treatment plants not otherwise specified
19 08 05	sludges from treatment of urban waste water
19 08 09	grease and oil mixture from oil/water separation containing only edible oils and fats
19 09	wastes from the preparation of water intended for human consumption or water for industrial use
19 09 02	sludges from water clarification
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

Table S2.2 Permitted waste types and quantities for anaerobic digestion				
Maximum quantity	Annual throughput shall not exceed 75,000 tonnes			
	The total quantity of hazardous waste stored at any time on its own or when mixed with /added to non-hazardous waste shall not exceed 50 tonnes.			
Exclusions	Wastes having any of the following characteristics shall not be accepted:			
	- consisting solely or mainly of dusts (except sawdust), powders, or loose fibres;			
	- wastes containing treated wood, wood-preserving agents or other biocides, persistent organic pollutants, Japanese Knotweed;			
	- hazardous wastes			
Waste code	Description			
20 01	separately collected fractions (except 15 01)			
20 01 08	biodegradable kitchen and canteen waste			
20 01 25	edible oil and fat			
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			

# Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [Point A1 on site plan in schedule 7]	Biofilter outlet stack	No parameter set	No limit set			
A2 [Point A2 on site plan in schedule 7]	Auxiliary boiler	No parameter set	No limit set			
Pressure relief valves	Digesters and digestate storage tanks	No parameter set	No limit set		Record of operating hours	
Vents from tank	Oil Storage tank	No parameter set	No limit set			

Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 on site plan in schedule 7 emission to Severn Trent WWTW foul sewer	Process water	No parameter set	No limit set			
S2 on site plan in schedule 7 emission to Severn Trent WWTW surface water sewer	Uncontaminated surface drainage	No parameter set	No limit set			

Table S3.3 Process monitoring requirements					
Emission point reference or source or description of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications	
Biogas from Digesters	Flow	Continuous	In accordance with EU weights and measures Regulations		
Biogas from Digesters	Methane	Continuous	None specified	Gas monitors to be calibrated in accordance with manufacturer's recommendations	
	Hydrogen sulphide	Daily	None specified		
Waste reception building; Digesters and storage tanks	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary	
Biofilter	Temperature	As required	Temperature probe	Biofilter shall be regularly checked	
	Moisture	As required	None specified	and maintained to ensure appropriate	
	Thatching/compaction	As required	None specified	temperature and moisture content.	
Scrubber system / Carbon filter	Key process parameters to include pH, temperature and air flow	In accordance with manufacturer's recommendations.	None specified	Scrubber system / Carbon filter shall be regularly checked and maintained to ensure appropriate temperature and moisture content.  Carbon filters to be replaced when saturated in accordance with manufacturer's	
Digesters and storage tanks	Integrity checks	Weekly	Visual assessment	recommendations.	

### Schedule 4 – Reporting

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

Table S4.1 Annual production/treatment			
Parameter	Units		
Biogas generated	m³		
Whole digestate	tonnes		
Liquid digestate	tonnes or m <sup>3</sup>		
Solid digestate	tonnes		

Table S4.2 Performance parameters				
Parameter	Frequency of assessment	Units		
Water usage	Annually	m <sup>3</sup>		
Energy usage	Annually	MWh		
Raw material usage	Annually	tonnes or m <sup>3</sup>		
Auxiliary boiler usage	Annually	hours		

Table S4.3 Reporting forms				
Media/parameter	Reporting format	Date of form		
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	08/03/16		
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	08/03/16		
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	08/03/16		
Waste returns	E-waste Return Form or other form as agreed in writing by the Environment Agency			

#### Schedule 5 - Notification

These pages outline the information that the operator must provide.

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

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

#### Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	
	any malfunction, breakdown or failure of equipment or techniques, nce not controlled by an emission limit which has caused, is pollution
To be notified within 24 hours of	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 th	e breach of a l	imit	
To be notified within 24 hours of d	etection unless	s otherwise specified k	pelow
Measures taken, or intended to be taken, to stop the emission			
Time periods for notification following	detection of a b	oreach of a limit	
Parameter			Notification period
			·
(c) Notification requirements for th	e detection of	any significant advers	e environmental effect
To be notified within 24 hours of d		any organicant actions	
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  Any more accurate information on the notification under Part A.		n as practicat	ole
Measures taken, or intended to be ta a recurrence of the incident	ken, to prevent		
Measures taken, or intended to be ta limit or prevent any pollution of the er which has been or may be caused by	nvironment		
The dates of any unauthorised emiss facility in the preceding 24 months.	ions 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 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

"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.

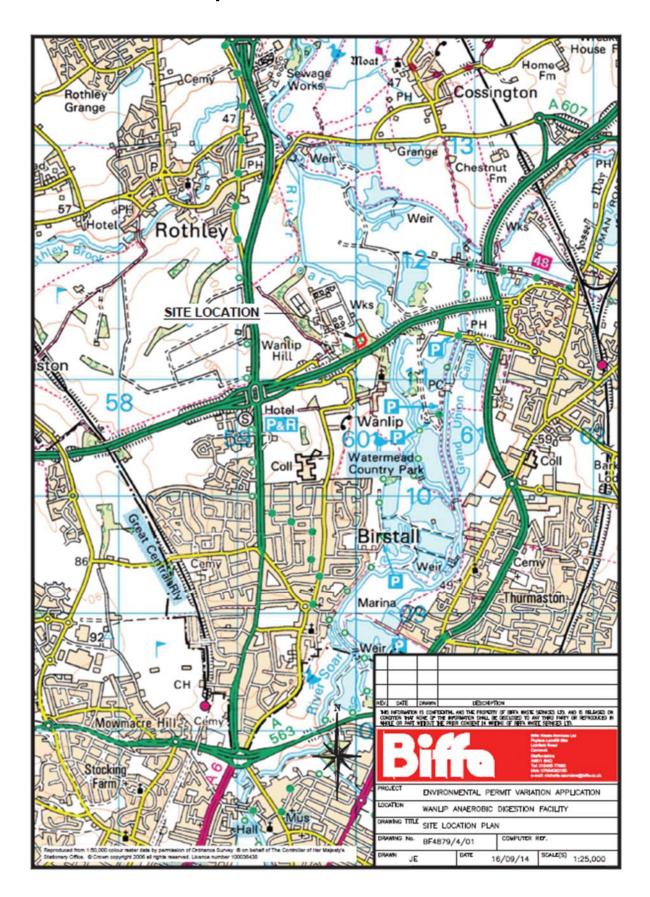
"year" means calendar year ending 31 December.

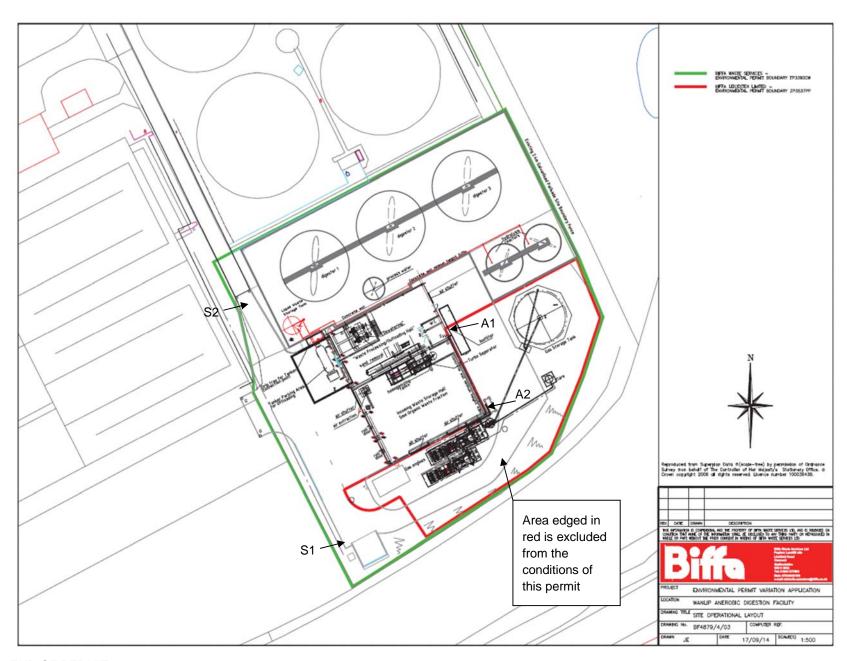
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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, 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/DB3806MD

Permit Number:	EPR/DI	B3806MD	Operator:	Biffa Leicester Limited	
Facility:	ility: Wanlip Composting and Anaerobic Digestion Facility		Form Number: Water Usage 1 / 08/03/16		
Reporting of Water Usaç	ge for the yea	ar			
Water Source		Usage (m³/year)		Specific Usage (m³/unit output)	
Mains water					
TOTAL WATER USAGE					
Operator's comments:					
Signed(authorised to sign as representative		Date			
(data of local to digit do representative	o or operator,				

Permit Number:	EPR/DB3806MD	Operator:	Biffa Le	eicester Limited
Facility:	Wanlip Composting and Anaerobic Digestion Facility	Form Number: Energy 1 / 08/03/16		
Reporting of Energy Us	age for the year			
Energy Source	Energy Usage			Specific Usage (MWh/unit output)
	Quantity	Primary Energy (MWh)		
Electricity *	MWh			
Recovered Fuel Oil	tonnes			
Gas Oil	tonnes			
TOTAL	-			
* Conversion factor for delivered ele	ectricity to primary energy = 2.4			
Operator's comments:				
Signed	Date.			
(Authorised to sign as representativ				
, iditionoca to sign as representativ	o or operator)			

Permit Number:	EPR/DB3806MD	Operator:	Biffa Leicester Limited	
Facility:	Wanlip Composting and Anaerobic Digestion Facility	Form Number:	Performance 1 / 08/03/16	
Reporting of other perfo	ormance indicators for the pe	eriod	to	
Parameter		Units	3	
Total raw material used		tonne	es	
Auxiliary boiler usage		hours	3	
Biogas generated		m <sup>3</sup>		
Operator's comments:				
Signed	Date			
(Authorised to sign as representativ				