

# Notice of variation and consolidation with introductory note

**The Environmental Permitting (England & Wales) Regulations 2010**

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Wessex Water Services Limited

Avonmouth CHP, Sludge Drying and Food Waste Treatment Facility  
Kings Weston Lane  
Avonmouth  
Bristol  
BS11 0YS

**Variation application number**

EPR/PP3734LK/V010

**Permit number**

EPR/PP3734LK

# Avonmouth CHP, Sludge Drying and Food Waste Treatment Facility

## Permit number EPR/PP3734LK

### Introductory note

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

Under the Environmental Permitting (England & Wales) Regulations 2010 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

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 variation authorises an increase in throughput for the on-site food waste treatment plant from 34,000 tonnes per year to 50,000 tonnes per year. No changes are proposed to the permitted waste types. No changes are proposed to the installation area or treatment process. The on-site plant was previously operating as a waste operation but due to the increase in capacity, it is becoming a listed installation activity; a S5.4A(1)(b)(i) activity (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)). The waste operation has therefore been removed from the permit and the variation also amends waste operations linked to the anaerobic digestion process to become directly associated activities.

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.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application received PP3734LK	Duly made 30/03/2006	Application for the combustion of fuel (biogas and natural gas) for the purpose of the generation of electricity and heat.
Additional information received	09/06/2006	
Additional information received	28/06/2006	
Additional information received	03/07/2006	
Additional information received	13/07/2006	
Additional information received	28/09/2006	
Additional information received	24/10/2006	
Additional information received	02/11/2006	
Permit determined PP3734LK	19/12/2006	Permit issued to Wessex Water Services Limited.
Variation application NP3533XC	Duly made 01/11/2007	Application to vary the permit for the additional digester capacity.
Additional information received	06/11/2007	Installation boundary plan.
Variation determined PP3734LK/V004	23/11/2007	Varied permit issued.
Variation application EPR/PP3734LK/V004	Duly made 07/03/2009	Application to vary the permit to add new activity relating to the manufacture of fuel pellets.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Variation determined EPR/PP3734LK/V004	16/02/2010	Varied permit issued.
Variation application EPR/PP3734LK/V005	Duly made 20/12/2010	Application to vary the permit to add a new food waste treatment plant.
Additional information received	15/02/2011	
Additional information received	21/02/2011	
Additional information received	04/03/2011	
Variation determined EPR/PP3734LK/V005	18/03/2011	Varied permit issued.
Variation application EPR/PP3734LK/V006	Duly made 27/11/2012	
Variation determined EPR/PP3734LK/V006	21/01/2013	Varied permit issued
Variation application EPR/PP3734LK/V007	Duly made 21/03/2013	Application to vary the permit for the reception of incoming waste into the post digestate storage tank.
Variation determined EPR/PP3734LK/V007	09/04/2013	Varied permit issued.
Agency initiated variation determined EPR/PP3734LK/V008	21/02/2014	Agency variation to implement the changes introduced by the Industrial Emissions Directive (IED).
Variation application EPR/PP3734LK/V009 (Billing ref TP3332VH)	Duly made 02/06/2014	Application to vary the permit to add a biomethane upgrade plant (BUP), to consolidate the permit and update the permit to modern conditions.
Variation determined EPR/PP3734LK/V009	20/08/2014	Varied and consolidated permit issued in modern condition format.
Application EPR/PP3734LK/V010 (variation and consolidation)	Duly made 18/03/2016	Application to vary and update the permit to modern conditions.
Variation determined EPR/PP3734LK	07/06/2016	Varied and consolidated permit issued in modern condition format.

End of introductory note

# Notice of variation and consolidation

## The Environmental Permitting (England and Wales) Regulations 2010

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

### Permit number

EPR/PP3734LK

### Issued to

**Wessex Water Services Limited** ("the operator")

whose registered office is

**Wessex Water Operations Centre  
Claverton Down Road  
Claverton Down  
Bath  
BA2 7WW**

company registration number 02366648

to operate a regulated facility at

**Avonmouth CHP, Sludge Drying and Food Waste Treatment Facility  
Kings Weston Lane  
Avonmouth  
Bristol  
BS11 0YS**

to the extent set out in the schedules.

The notice shall take effect from 07/06/2016

Name	Date
Anne Nightingale	07/06/2016

Authorised on behalf of the Environment Agency

**Schedule 1**

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

**Schedule 2 – consolidated permit**

Consolidated permit issued as a separate document.

# Permit

## The Environmental Permitting (England and Wales) Regulations 2010

### Permit number

**EPR/PP3734LK**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/PP3734LK/V010 authorising,

**Wessex Water Services Limited** (“the operator”),

whose registered office is

**Wessex Water Operations Centre  
Claverton Down Road  
Claverton Down  
Bath  
BA2 7WW**

company registration number 02366648

to operate an installation at

**Avonmouth CHP, Sludge Drying and Food Waste Treatment Facility  
Kings Weston Lane  
Avonmouth  
Bristol  
BS11 0YS**

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

Name	Date
Anne Nightingale	07/06/2016

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 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

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

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) 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 S4.2; and
- (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

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

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

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

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

## 4.3 Notifications

4.3.1 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:
- (c) the death of any of the named operators (where the operator consists of more than one named individual);
  - (d) any change in the operator's name(s) or address(es); and
  - (e) 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.
- 4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:
- (a) a decision by the Secretary of State not to re-certify the agreement;
  - (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
  - (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

## **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

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
A1	Section 5.5 Part A(1)(a)	Making solid fuel (other than charcoal) from waste by any process involving the use of heat.	From receipt of sewage sludge from the adjacent sewage treatment works to final production of fuel pellets.
A2	Section 5.4 Part 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 tanks followed by burning of biogas produced from the process. Including pasteurisation process. Waste types suitable for acceptance are limited to those specified in Table S2.3.
<b>Directly Associated Activity</b>			
A3	Storage and handling of raw materials and lubrication oils	Raw material storage	From receipt of raw materials to dispatch for use.
A4	Storage and handling of wastes including waste oils	Storage and handling of wastes generated by the processes	From the generation of the waste through to its removal from the installation.
A5	Site drainage	Surface water and condensate drainage	Collection of site drainage for discharge to the adjacent sewage treatment works.
A6	Abatement plant for emissions to air	Abatement plant for control of emissions from pelletising plant activities	From receipt of exhaust gas to discharge to atmosphere.
A7	Utilities supply	Operation of systems for supply of utilities and services such as natural gas and electricity	Utilities and service systems within the installation boundary.
A8	Storage and dosing of water treatment chemicals in the adjacent sewage treatment works ('iron salt dosing')	Storage and dosing of water treatment chemicals in the adjacent sewage treatment works	From receipt of raw material to use in the dosing process in the adjacent sewage treatment works.
A9	Storage of waste pending recovery or disposal	R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced)	From the receipt of permitted waste to pre-treatment and despatch for anaerobic digestion on site. Storage of waste in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with sealed drainage system.

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
A10	Physical treatment for the purpose of recycling	R3: Recycling/reclamation of organic substances which are not used as solvents	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). Gas cleaning by biological or chemical scrubbing.
A11	Gas storage	Storage of biogas produced from on-site anaerobic digestion of permitted waste in stand-alone tank(s) or roof space of digester(s).	From the receipt of biogas produced at the on-site anaerobic digestion process to despatch for use.
A12	Steam and electrical power supply	R1: Use principally as a fuel to generate energy	Receipt of gas generated from the sewage treatment works and FWTP digesters and the supply of electricity to the grid.  Combustion of biogas in 5 combined heat and power (CHP) engines with an aggregated thermal input of 15.77 MWth.
A13	Gas upgrading	Upgrading of biogas to biomethane (including the removal of moisture and other substances such as carbon dioxide, hydrogen sulphide, volatile organic compounds) for injection into the National Grid.	From the receipt of biogas produced at the on-site anaerobic digestion process to injection into the National Grid. This includes return of off-specification biogas for combustion to the on-site CHP engine(s), auxiliary boiler(s) and/or emergency flare.
A14	Emergency flare operation	D10: Incineration on land	From the receipt of biogas produced at the on-site anaerobic digestion process to incineration with the release of combustion gases. Use of flare only required during period of breakdown, or maintenance of the plant.

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
A15	Digestate storage	R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced).  Storage of liquid digestate in storage tank(s).	From the receipt of digestate produced from the on-site anaerobic digestion process to despatch for use off-site.

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application PP3734LK	The response to section 2.1 and 2.2 in the application.	30/03/2006
Variation application NP3533XC	The response to section 2.1 and 2.2 in the application.	01/11/2007
Variation application EPR/PP3734LK/V004	The response to section 2.1 and 2.2 in the application.	07/03/2009
Variation application EPR/PP3734LK/V005	Sections 2.1, 2.2, 3.1, 3.2, 3.3, 3.4, 5.1, 5.2, 5.3 and 5.4 in the application.	20/12/2010
Additional information received	The responses specifying process vessel design and capacities.	04/03/2011
Variation application EPR/PP3734LK/V006	Response to question 4 in Part C1 and question 5 in Part C2 in the application.	01/10/2012
Additional information received	Further information on process vessel infrastructure, document GENWMEA003 (Response to PO04).	27/11/2012
Variation application EPR/PP3734LK/V007	Response to application forms Part C2 and Part C3 and supporting documents.	21/03/2013
Variation application EPR/PP3734LK/V009	Response to application forms Part C2 and Part C3 and supporting documents.	02/06/2014
Variation application EPR/PP3734LK/V010	Response to application forms Part C2 and Part C3 and supporting documents.	18/03/2016



<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC1	The Operator shall update the site Training Plan taking account of the new activities introduced by this variation and submit a written copy for approval by the Environment Agency. The plan shall have regard to the requirements set out in section 1 of the Guidance Note EPR 1.00 Getting the Basics Right, and shall be implemented by the Operator from the date of approval in writing by the Environment Agency.	Complete
IC2	The Operator shall assess the levels of NO <sub>x</sub> , SO <sub>2</sub> , CO, total VOC and non-methane VOC emissions from the installation to confirm previously monitored values for the releases to air. The assessment shall take into account any emissions of the same substances from other release points (including the drum dryer stack, A23). The Operator shall use this monitoring data to assess the potential for impacts on the environment using the Agency's HI Impact Assessment Tool and/or air quality dispersion modelling, as appropriate, taking into account the increased stack heights. The method of assessment is to be agreed with the Agency prior to implementation. The Operator shall propose and implement, where appropriate, any remedial actions necessary where indicated by the model outputs. The results of the assessments shall be submitted to the Environment Agency in a written report.	Complete
IC3	The Operator shall undertake a review of all emissions to air having regard for the Best Available Techniques set out in Guidance Note EPR 1.01, Combustion Activities and Guidance Note LFTGN06, Guidance on Gas Treatment Technologies for Landfill Gas Engines. The Operator shall identify and demonstrate typical emission rates and use these to propose, for agreement, emission limit values to be adopted and included in table S4.1. The Operator shall submit a written report, detailing the findings and conclusions of the review and making proposals for improvements together with a timetable for their implementation. The proposed improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	Complete
IC4	The Operator shall carry out a review of options available to reduce the usage of the flare stack. The Operator shall provide a written report for approval by the Environment Agency detailing the findings of the review, any recommendations for improvements to the operation of the plant and an implementation timetable. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the report. The improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	Complete
IC5	The Operator shall update its Site Closure Plan having regard to the requirements set out in section 1 of the EPR Technical Guidance Note EPR1.00, Getting the Basics Right. Upon completion of the Plan a summary of the document shall be submitted to the Environment Agency in writing. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the Plan. The plan shall be implemented by the Operator from the date of approval in writing by the Environment Agency.	Complete

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC6	The Operator shall identify and assess options for the optimisation of iron salt dosing in the STW. The Operator shall submit a written report to the Environment Agency detailing the findings of the assessment and making proposals for improvements to the efficiency of iron salt dosing (including any necessary plant modifications), together with a timetable for the implementation of these proposals. The proposed improvements shall be implemented by the Operator from the date of approval in writing by the Agency.	Complete
IC7	The Operator shall propose a site energy balance such that annual reports are produced, examining methane and natural gas usage, individual CHP engine efficiency, waste heat usage and fuel produced. The results of the annual site energy balance assessments shall be submitted to the Environment Agency in a written report.	Complete
IC8	The operator shall supply a referenced site plan that details the location and identity of all emission points to air and sewer from activities within the regulated facility. The plan shall be submitted to the Environment Agency for approval.	Complete
IC9	The operator shall update the Accident Management Plan, Training Plan, Odour Management Plan and Site Closure Plans to take account of the additional activities at the facility resulting from operation of the food waste treatment plant. A report summarising the changes to these plans shall be submitted to the Environment Agency for approval.	Complete
IC10	The operator shall undertake a study to assess the efficiency of the Biofilter Unit and its capability to achieve the design emission capability of 1,500 OUE/m <sup>3</sup> . The study shall also assess the capability of the Biofilter Unit to abate any bio aerosol release from the process building. A report detailing the findings of the study shall be submitted to the Environment Agency for approval.	Complete
IC11	The operator shall carry out a feasibility study to evaluate alternative uses of the biogas produced on site other than for electricity generation (for example either direct feed to the gas grid or production of an alternative fuel). As part of this study, the report should also consider the use of local third party sources of waste heat to enable and maximise that alternate use. The study should include provision for suitable periodic reviews, to ensure that developing local sources of waste heat and financial incentives are considered. The report should include the viability of the alternative uses considered and if shown to be viable, a justification should be presented to propose future biogas use.	Complete

**Table S1.3 Improvement programme requirements**

Reference	Requirement	Date
IC12	<p>The operator shall submit a report to the Agency detailing how biogas generation efficiency is monitored and how its production is optimised within the constraints of the plant and feed types. The report shall include an assessment of online process control techniques used to optimise the biogas production, and where these techniques are not used, a justification for their omission shall be provided.</p> <p>The report shall detail the methodology to be adopted to optimise biogas production and include an assessment of the critical process variables that are monitored to achieve optimum biogas production. The report shall also make proposals for appropriate biogas generation performance indicators to be subsequently included in table S4.3 in schedule 4 of this permit.</p> <p>The biogas optimisation methodology and performance measures shall be implemented in accordance with, and from the date of approval of the report by the Environment Agency.</p>	Complete
IC13	<p>The operator shall provide bunding considered suitable within TGN and adequate protection from potential vehicle collision for the liquid waste reception tank and update the emergency plan to incorporate both relocated tanks.</p> <p>A written plan shall be submitted to the Environment Agency within one month and the works are to be completed within 3 months.</p>	Complete
IC14	<p>The operator shall review existing measures and procedures that exist to prevent and mitigate potential spillage and leakage from the installations storage tanks.</p> <p>The operator shall supply the Agency with a written copy of the review and shall implement identified improvements to a timescale agreed with the Agency.</p>	Complete

## 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 solid fuel pelletiser plant (Activity Reference A1 in Table S1.1)	
Maximum quantity	Annual throughput shall not exceed 38,000 tonnes
Waste code	Description
<b>19</b>	<b>Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use</b>
<b>19 06</b>	<b>wastes from anaerobic treatment of waste</b>
19 06 06	Digestate from anaerobic treatment of animal and vegetable waste
19 08 05	Sludges from treatment of urban waste water

Table S2.3 Permitted waste types and quantities for anaerobic digestion (Activity Reference A2 in Table S1.1)	
Maximum quantity	Annual throughput shall not exceed 50,000 tonnes
Waste code	Description
<b>02</b>	<b>Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 01	sludges from washing and cleaning – food processing waste, food washing waste
02 01 02	animal tissue waste – category 3 animal by-products (ABP) including blood, animal flesh, fish processing waste, fish carcasses, poultry waste – Category 2 ABP – paunch contents
02 01 03	plant tissue waste – husks, cereal dust, waste animal feeds
02 01 06	animal faeces, urine and manure (including spoiled straw) only
02 01 07	wastes from forestry
02 01 99	wastes not otherwise specified - residues from commercial mushroom cultivation
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
02 02 01	sludges from washing and cleaning– process water – food washing waste
02 02 02	animal tissue waste – Category 3 ABP including blood, animal flesh, fish processing waste, fish carcasses, poultry waste
02 02 03	materials unsuitable for consumption or processing – coffee, food processing waste, jam, kitchen waste, fruit, vegetable oil, tobacco, tea, vegetable waste – waste fat from processing of meat or fish
02 02 04	sludges from on-site effluent treatment

**Table S2.3 Permitted waste types and quantities for anaerobic digestion (Activity Reference A2 in Table S1.1)**

<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 50,000 tonnes</b>
<b>Waste code</b>	<b>Description</b>
02 02 99	wastes not otherwise specified – sludges from gelatine production, animal gut contents
<b>02 03</b>	<b>wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation</b>
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation– coffee, mushroom compost, food processing waste, food washing waste, tobacco
02 03 02	wastes from preserving agents – only organic material that is biodegradable
02 03 04	biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances)
02 03 05	effluent from the processes referred to in sources of waste
02 03 99	wastes not otherwise specified - sludge from production of edible fats and oils to include seasoning residues, molasses residues, residues from production of potato, corn or rice starch
<b>02 04</b>	<b>wastes from sugar processing</b>
02 04 03	sludges from on-site effluent treatment – biological sludge
02 04 99	wastes not otherwise specified - other biodegradable wastes
<b>02 05</b>	<b>wastes from the dairy products industry</b>
02 05 01	biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances) – solid and liquid dairy products, milk, food processing wastes, yoghurt, whey
02 05 02	sludges from on-site effluent treatment
02 05 99	wastes not otherwise specified – other organic wastes that are biodegradable
<b>02 06</b>	<b>wastes from the baking and confectionery industry</b>
02 06 01	biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances) – food condemned, food processing wastes, biscuits, chocolate, yeast, bread, bakery waste
02 06 02	wastes from preserving agents – only organic material that is biodegradable
02 06 03	sludges from on-site effluent treatment
02 06 99	wastes not otherwise specified – other organic wastes that are biodegradable
<b>02 07</b>	<b>wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)</b>
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials – brewing waste, food processing waste, fermentation waste
02 07 02	wastes from spirits distillation – spent grains, fruit and potato pulp – sludge from distilleries
02 07 04	biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances) – brewing waste, food processing waste, fermentation waste, beer, alcoholic drinks, fruit juice
02 07 05	sludges from on-site effluent treatment
02 07 99	wastes not otherwise specified - spent grains, hops and whisky filter sheets/cloths
<b>03</b>	<b>Wastes from wood processing and the production of panels and furniture, pulp, paper</b>

<b>Table S2.3 Permitted waste types and quantities for anaerobic digestion (Activity Reference A2 in Table S1.1)</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 50,000 tonnes</b>
<b>Waste code</b>	<b>Description</b>
<b>and cardboard</b>	
<b>03 03</b>	<b>wastes from pulp, paper and cardboard production and processing</b>
03 03 02	green liquor sludge – paper sludge, green liquor
03 03 08	wastes from sorting of paper and cardboard destined for recycling – cardboard, newspaper, tissues, paper
03 03 10	fibre rejects and sludges – paper pulp (de-inked only), paper fibre
03 03 11	wastes not otherwise specified - sludges from on-site effluent treatment other than those mentioned in 03 03 10
<b>04 Wastes from the leather, fur and textile industries</b>	
<b>04 01</b>	<b>wastes from the leather and fur industry</b>
04 01 01	fleshings and lime split wastes
04 01 05	tanning liquor free of chromium
04 01 07	sludges not containing chromium
<b>04 02</b>	<b>wastes from the textile industry</b>
04 02 10	organic matter from natural products, e.g. grease, wax
<b>07 Wastes from organic chemical processes</b>	
<b>07 02</b>	<b>wastes from the manufacture, formulation, supply and use of plastics, synthetic rubber and man-made fibres</b>
07 02 13	waste plastic - must conform to BS EN 13432. Only as packaging containing organic waste.
<b>07 06</b>	<b>wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics</b>
07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11 – but excluding sludges resulting from the on-site treatment of disinfectants
<b>15 Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified</b>	
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging - must conform to BS EN 13432 - no manmade substances. Only as packaging containing organic waste.
15 01 02	plastic packaging - must conform to BS EN 13432. Only as packaging containing organic waste.
15 01 03	wooden packaging - must conform to BS EN 13432. Only as packaging containing organic waste.
15 01 05	composite packaging - must conform to BS EN 13432. Only as packaging containing organic waste.
<b>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</b>	
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
19 02 09	glycerol
19 02 10	combustible wastes

<b>Table S2.3 Permitted waste types and quantities for anaerobic digestion (Activity Reference A2 in Table S1.1)</b>	
<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 50,000 tonnes</b>
<b>Waste code</b>	<b>Description</b>
<b>19 05</b>	<b>wastes from aerobic treatment of solid wastes</b>
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost from source segregated biodegradable waste
19 05 99	wastes not otherwise specified - other organic biodegradable wastes
<b>19 06</b>	<b>wastes from anaerobic treatment of waste</b>
19 06 03	liquor from anaerobic treatment of municipal waste
19 06 04	digestate from anaerobic treatment of source segregated biodegradable waste
19 06 05	liquor from anaerobic treatment of animal and vegetable waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
19 06 99	wastes not otherwise specified - other organic biodegradable wastes
<b>19 08</b>	<b>wastes from waste water treatment plants not otherwise specified</b>
19 08 01	screenings – only the organic fraction which is biodegradable
19 08 05	sludges from treatment of urban waste water
19 08 09	grease and oil mixture from oil/water separation containing only edible oil and fats
19 08 12	sludges from industrial biological treatment
19 08 14	sludges from other treatment of industrial waste water other than those mentioned in 19 08 13 – only biodegradable sludges resulting from the treatment of waste water with high organic matter content
<b>19 09</b>	<b>wastes from the preparation of water intended for human consumption or water for industrial use</b>
19 09 02	sludges from water clarification – only the biodegradable organic fraction where the purpose of the clarification process is to remove organic solids
<b>20</b>	<b>Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard - only as packaging containing organic waste.
20 01 08	biodegradable kitchen and canteen waste
20 01 25	edible oil and fat
20 01 38	wood other than that mentioned in 20 01 37, and only where no non-biodegradable coating or preserving substance present - must conform to BS EN 13432
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 01	biodegradable waste – animal faeces, manure, garden waste, green waste, horticultural waste, plant tissue, parks and garden waste, hedge and tree trimmings, grass cuttings and leafy materials
<b>20 03</b>	<b>other municipal wastes</b>
20 03 01	mixed municipal waste – separately collected biowastes
20 03 02	wastes from markets - markets – allowed only if source segregated biodegradable fractions

**Table S2.3 Permitted waste types and quantities for anaerobic digestion (Activity Reference A2 in Table S1.1)**

<b>Maximum quantity</b>	<b>Annual throughput shall not exceed 50,000 tonnes</b>
<b>Waste code</b>	<b>Description</b>
	eg. plant material, fruit and vegetables.
20 03 04	septic tank sludge
20 03 06	waste from sewage cleaning



## Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 to A5 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Exhaust gas from spark ignition engines referenced A1 to A5	650 mg/m <sup>3</sup>	Hourly average over a period of a least 4 hours	Annually	BS EN 14792 (Permanent sampling access not required)
	Carbon monoxide		1500 mg/m <sup>3</sup>	Hourly average over a period of a least 4 hours	Annually	BS EN 15058 (Permanent sampling access not required)
	Sulphur dioxide		No limit set	Hourly average over a period of a least 4 hours	Annually	BS6069 (Permanent sampling access not required)
	Total VOCs		No limit set	Hourly average over a period of a least 4 hours	Annually	BS EN 12619 or BS EN 13526 depending on concentration (Permanent sampling access not required)
	Non methane VOCs (as benzene)		No limit set	Hourly average over a period of a least 4 hours	Annually	BS EN 13649:2002 (Permanent sampling access not required)
A6 to A10 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Engine housing breather pipes	No limit set	--	--	--
A12 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Gas line pressure release valve - raw biogas	No limit set	--	--	--

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A21 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Flare Stack biogas	No limit set	--	--	--
A22 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	Total VOCs	Belt dryer stack	No limit set	Hourly average over a period of at least 4 hours	Annually	BS EN 12619 or BS EN 13526 depending on concentration (Permanent sampling access not required)
	Non methane VOCs (as benzene)		No limit set	Hourly average over a period of at least 4 hours	Annually	BS EN 13649:2002 (Permanent sampling access not required)
A23 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Drum dryer stack	300 mg/m <sup>3</sup>	Hourly average over a period of at least 4 hours.	Annually	BS EN 14792 (Permanent sampling access not required)
A24 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	Particulates	Pellet silo dust filter	No limit set	Hourly average over a period of at least 4 hours	Annually	BS EN 13284-1 or MDHS 14/3
A25 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	Particulates	Pellet silo dust filter	No limit set	Hourly average over a period of at least 4 hours	Annually	BS EN 13284-1 or MDHS 14/3

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A26 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	Particulates	Pellet bagging plant dust filter	No limit set	Hourly average over a period of at least 4 hours	Annually	BS EN 13284-1 or MDHS 14/3
A32 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	"Whessoe valve" used for emergency release of biogas	No limit set	--	--	--
A33 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Gas line PRC emergency pressure relief	No limit set	--	--	--
A34 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	Temperature, moisture and thatching /compaction	Biofilter exhaust stack which vents process building of food waste treatment plant	No limit set	--	Biofilters should be checked and maintained to ensure appropriate temperature and moisture content on a daily basis	--
A35 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Biological scrubber stack	No limit set	--	--	--
A36 as shown on the 'installation boundary and point source emissions' plan in Appendix C of	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Biomethane flare stack	No limit set	--	--	--

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
EPR/PP3734LK/V009	Carbon monoxide					
	Total VOCs					
	Sulphur dioxide					

<b>Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (incl. unit)</b>	<b>Reference Period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
S1 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Condensate discharge from gas pipe, surface water run off and engine house sump interceptor.	No limit set	--	--	--
S2 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Condensate discharge from gas pipe.	No limit set	--	--	--
S3 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Condensate discharge from gas pipe.	No limit set	--	--	--
S4 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Condensate discharge from gas pipe.	No limit set	--	--	--

<b>Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (incl. unit)</b>	<b>Reference Period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
S5 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Condensate discharge from gas pipe	No limit set	--	--	--
S6 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Condensate discharge from gas pipe	No limit set	--	--	--
S7 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Condensate discharge from gas pipe	No limit set	--	--	--
S10 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Belt dryer scrubber discharge	No limit set	--	--	--
S11 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Drum dryer scrubber discharge	No limit set	--	--	--
S12 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Surplus de-watering liquor and cleaning water from food waste treatment plant	No limit set	--	--	--

<b>Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (incl. unit)</b>	<b>Reference Period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
S13 as shown on the 'installation boundary and point source emissions' plan in Appendix C of EPR/PP3734LK/V009	No parameters set	Biological scrubber discharge	--	--	--	--

<b>Table S3.3 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Engines 1 to 5	Hours of operation	Continuous	Not applicable	--
Flare	Hours of operation	Continuous	Not applicable	--
Blended biogas as supplied to the engines	H <sub>2</sub> S (as sulphur) content of blended biogas	Continuous	To be agreed with the Environment Agency	Monthly Average
Drum dryer unit	Hours of operation	Continuous	Not applicable	--
Biomethane flare	Hours of operation	Continuous	Not applicable	--

## Schedule 4 – Reporting

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

<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Oxides of nitrogen Parameters as required by condition 3.5.1	A1, A2, A3, A4, A5, A23	Annually	01/12/09
Carbon monoxide Parameters as required by condition 3.5.1	A1, A2, A3, A4, A5, A23	Annually	01/12/09
Sulphur dioxide Parameters as required by condition 3.5.1	A1, A2, A3, A4, A5, A23	Annually	01/12/09
Total VOCs Parameters as required by condition 3.5.1	A1, A2, A3, A4, A5, A22, A23	Annually	01/12/09
Non methane VOCs Parameters as required by condition 3.5.1	A1, A2, A3, A4, A5, A22, A23	Annually	01/12/09
Particulates	A24, A25, A26	Annually	01/12/09
H <sub>2</sub> S (as sulphur) Content of blended biogas	Blended biogas as supplied to the engine	Quarterly	01/12/09

<b>Parameter</b>	<b>Units</b>
Electricity generated	MWh
Sewage sludge imported to the Pellet Drying Plant	tonne
Sludge pellets exported from the Pellet Drying Plant	tonne
Waste imported to the Food Waste Treatment Plant	tonne
Digestate cake exported from the Food Waste Treatment Plant	tonne
Non digestible residues exported from the Food Waste Treatment Plant	tonne

<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Natural gas usage	Annually	m <sup>3</sup>
Biogas usage	Annually	m <sup>3</sup>
Electricity usage	Annually	MWh
Gas engine flare stack operation	Annually	Hours
Biomethane flare stack operation	Annually	Hours
CHP engine efficiency	Annually	%

<b>Table S4.3 Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Drum dryer operation	Annually	Hours
Biogas production efficiency – parameters as approved in IC12	Annually	As approved by the Agency

<b>Table S4.4 Reporting forms</b>		
<b>Media/parameter</b>	<b>Reporting format</b>	<b>Date of form</b>
Air	Form air 1 or other form as agreed in writing by the Environment Agency	18/03/11
Air	Form Air 2 – Biogas from STW and FWTP digesters, or other form as agreed in writing by the Agency	18/03/11
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY
Waste (Food Waste Treatment Plant)	Form Waste 1 – or other form as agreed in writing by the Agency	18/03/11



## Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

### Part A

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

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

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

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

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

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

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

Name*	
Post	
Signature	
Date	

\* authorised to sign on behalf of the operator

## Schedule 6 – Interpretation

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

“ADQP” means Anaerobic Digestion Quality Protocol.

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

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

“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.

“Commissioning” will commence at the point at which waste is received at the site and will be considered as complete at the point at which the plant is formally handed over from the Technology Contractor to the operator.

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

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

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

“emissions to land” includes emissions to groundwater.

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

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

“Hazardous waste” has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended).

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

“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.

“List of Wastes” means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on

waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

“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 veneer).

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk.

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

“year” means calendar year ending 31 December.

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

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

- in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid fuels, 3% or 5% for gaseous fuels, 6% dry for solid fuels; and/or
- in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.



# Schedule 7 – Site plan

Installation boundary

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END OF PERMIT