

# Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Welland Waste Management Limited

Pebble Hall Farm TAD Facility Pebble Hall Farm Theddingworth Leicestershire LE17 6NJ

Permit number

EPR/YP3938WV

# Pebble Hall Farm TAD Facility Permit number EPR/YP3938WV

## Introductory note

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

The main features of the permit are as follows:

The Installation is centred at grid reference SP 66154 84601 and located approximately 1.1 km south west of Theddingworth and 1.7 km east of Husbands Bosworth. It is bounded to the north by an existing open windrows composting facility, to the south and east by a gasification plant and to the west by River Welland. One Site of Special Scientific Interest (Coombe Hill Hollow) and one Local Wildlife Site (Hothorpe Hill Woodlands) are located within 2 km of the Installation. Assessment by the Environment Agency shows that emissions from the Installation are unlikely to have an adverse impact on interest features of the ecological sites.

The facility will process up to 36,000 tonnes per annum of biodegradable waste and will comprise the following:

- a waste reception building consisting pre-treatment plant and oil centrifuge system; and
- a waste treatment building consisting aerobic digesters and storage tanks.

Biodegradable waste will be delivered to the site in covered vehicles and will be deposited in a sealed waste reception building which is fitted with odour abatement. Waste will undergo pre-treatment (de-packaging and maceration) using a de-packaging machine with a maceration size of 20 mm diameter. The waste (in slurry form) will undergo screening to 6 mm to remove residual packaging materials prior to transfer to the oil recovery system or the thermophilic aerobic digestion (TAD) system.

The oil recovery system consists of heating vessels and centrifuges which remove 98 per cent of the oil from the biodegradable waste. The resulting oil is pumped to oil storage tanks and despatched off-site for recovery by licensed third-party waste oil processors. The remaining waste solids are transferred to a sealed treatment building which houses the TAD system where it undergoes digestion under aerobic conditions. To ensure pathogen kill, the waste is held for 1 hour at 70°C in accordance with the Animal By-products Regulations. Leachate from the pre-treatment process will be collected and fed back into the TAD system. The by-product from the process (whole digestate) will be transferred to two storage tanks in the sealed treatment building prior to transfer off-site for use in land spreading or to third-party anaerobic digestion facilities for use as feedstock. This environmental permit does not authorise the combustion of oil /biodiesel via CHP engines, drying of digestate and spreading of digestate on land.

All activities will take place in sealed, negatively aerated, buildings to prevent the release of odour, bioaerosols, noise or dust to the external atmosphere. Air from the waste reception and treatment buildings will be treated through one biofilter consisting of four media beds. The permit requires process monitoring of the biofilter to confirm its effectiveness.

Main releases to air will be odour emissions from the processing of waste through the biofilter. There will be no process discharges to controlled waters. Uncontaminated site surface water from the building roof arising from rain will be discharged to an off-site lagoon under the control of the adjacent gasification plant. Operational areas within the waste reception and treatment buildings will be provided with hardstanding and secondary containment constructed in line with industry best practice standards to reduce the impact of pollution to surface water and groundwater.

An Environmental Management System (EMS) will be in place prior to the commencement of site commissioning. Site management plans will be in place to ensure that the environment and human health are protected from emissions to air, land and water.

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

Status log of the permit		
Description	Date	Comments
Application EPR/YP3938WV/A001	Duly made 11/11/15	Application for a thermophilic aerobic digestion facility.
Additional information received	05/02/16	Response to Schedule 5 notice #1 dated 11/01/16.
Additional information received	31/03/16	Response to noise modelling queries.
Additional information received	12/04/16	Further response to noise modelling queries.
Additional information received	15/04/16	Response to Schedule 5 notice #2 dated 21/03/16.
Additional information received	20/04/16	Clarification of steam generator details and operation.
Additional information received	25/04/16	Digester operational parameters.
Draft permit made available for public consultation	23/05/16	
Permit determined	DD/MM/YY	Permit issued to Welland Waste Management Limited.

Other Part A installation permits relating	to this installation	
Operator	Permit number	Date of issue
MWH Treatment Limited	EPR/GP <mark>34</mark> 32WP	13/05/16
End of introductory note		

## Permit

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

#### Permit number

#### EPR/YP3938WV

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010

Welland Waste Management Limited ("the operator"),

whose registered office is

Pebble Hall Theddingworth Lutterworth Leicestershire LE17 6NJ

company registration number 05685884

to operate an installation at

Pebble Hall Farm TAD Facility Pebble Hall Farm Theddingworth Leicestershire LE17 6NJ

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

Name		Date

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 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 activities shall not be brought into operation until the measures specified in schedule 1 table S1.4 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.
- 3.1.3 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 Pests

- 3.5.1 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.
- 3.5.2 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.

### 3.6 Monitoring

- 3.6.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
  - (a) point source emissions specified in table S3.2;
  - (b) process monitoring specified in table S3.3;
  - (c) bioaerosols monitoring specified in table S3.4
- 3.6.2 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.
- 3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.
- 3.6.4 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 table S3.2 unless otherwise agreed in writing by the Environment Agency.

## 3.7 Fire prevention

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

#### 3.7.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
- (b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency

## 4 Information

#### 4.1 Records

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

## 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:
  - (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
  - (b) the annual production/treatment data set out in schedule 4 table S4.2; and
  - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
  - (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report

assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.
- 4.2.6 The operator shall submit to the Environment Agency a bi-annual report of the efficiency of the biofilter in the first year of site operations. This shall include but not be limited to, the assessment of the efficiency to reduce odours, the summary of maintenance and any re-commissioning planned or conducted, assessment of back pressure, venting and cracking. Thereafter the operator shall submit the report within one month of the end of each year, unless otherwise agreed in writing by the Environment Agency.

## 4.3 Notifications

#### 4.3.1 In the event:

- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
  - (i) inform the Environment Agency,
  - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition the operator must immediately-
  - (i) inform the Environment Agency, and
  - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

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

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

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

In any other case:

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

## 4.4 Interpretation

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

# Schedule 1 – Operations

Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
A1	S5.4 A(1) (b) (i) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving biological treatment.	R3: Recycling/reclamation of organic substances which are not used as solvents	From receipt of waste through to aerobic digestion and recovery of by- products. Digestion of waste under aerobic conditions in tanks located in the sealed treatment building and fitted with appropriate odour abatement. The biological treatment of wastes under anaerobic conditions is not permitted.
			Waste types suitable for acceptance are limited to those specified in Table S2.2.
	Directly Associated Activity		1
A2	Storage of waste pending recovery	R13: Storage of waste pending the R3 operation (excluding temporary storage, pending collection, on the site where it is produced)	Undertaken in relation to Activity A1. From the receipt of waste to despatch for biological treatment or despatch off site for recovery. Storage of residual wastes from pre-treatment to despatch off-site for recovery and/or disposal.
			Storage of waste in the sealed waste reception and treatment buildings 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.

Activity	Activity listed in Schedule		Limits of specified
reference	1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	activity and waste types
A3	Physical treatment for the purposes of recycling	R3: Recycling/reclamation of organic substances which are not used as solvents	Undertaken in relation to Activity A1.
			From the receipt of waste to despatch for biological treatment or despatch off site for recovery.
			Pre-treatment of waste prior to biological treatment in the sealed waste reception building and on an impermeable surface
			including de-packaging, shredding, sorting, screening, compaction, baling, mixing and maceration.
			Post-treatment of processed digestate in the sealed treatment building and on an impermeable surface including screening to remove contraries.
			Waste types suitable for acceptance are limited to those specified in Table S2.2.
A4	Steam production	Raising of steam for oil recovery system via	Undertaken in relation to Activity A1.
		generator, thermal input 324 kW.	The power source for the steam generator shall be operated with the appropriate authorisation from the relevant competent authority.
A5	Raw material storage	Storage of raw materials including lubrication oil, diesel, chemical additives.	Undertaken in relation to Activity A1.
			From the receipt of raw materials to despatch for use within the facility.
A6	Digestate storage	R13: Storage of waste pending the operations R1 to R12 (excluding	Undertaken in relation to Activity A1.
		temporary storage, pending collection, on the site where it is produced)	From the receipt of processed digestate produced at the facility to

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
			despatch for use off-site. Storage of waste digestate in two digestate tanks located in the sealed treatment building fitted with appropriate odour abatement and on an impermeable surface.
A7	Processed oil storage	R13: Storage of waste pending the operations R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Undertaken in relation to Activity A1. From the receipt of processed waste oil derived from physical treatment of food waste at the facility to despatch for recovery off- site. Storage of recovered waste oil in tanks provided with secondary containment and on an impermeable surface.
A8	Surface water handling	Collection and discharge of uncontaminated water.	Undertaken in relation to Activity A1. From the collection of uncontaminated water from the waste reception and treatment building roofs to discharge to off-site lagoon under permit EPR/GP3432WP.

Table S1.2 Operating techniques		
Description	Parts <sup>1</sup>	Date Received
Response to Schedule 5 Notice #1 dated 11/01/16	Response to questions 3, 4, 7 and 9; BAT assessment, Accident management plan.	05/02/16
Response to Schedule 5 Notice #2 dated 21/03/16	Response to question 1 (working plan version 4.1, odour management plan); Response to question 2 (details of steam generator); Response to questions 5 to 9 (pre-acceptance of wastes); Response to questions 10 and 11 (list of wastes); Response to question 12 (fire water management); Response to questions 13 to 17 (treatment); Response to questions 16 and 17 (biofilter); Response to questions 20 and 21 (secondary containment);	15/04/16

Table S1.2 Operating techniques		
Description	Parts <sup>1</sup>	Date Received
	Response to question 22 (technically competent manager)	
Additional information	Additional information detailing operation of steam generator and clarification of power source.	20/04/16
Additional information	Additional information detailing digester operational parameters.	25/04/16
Note 1 - Reference to co	mbustion of oil / biodiesel in CHP engines and digestate drying is	excluded from this

application and the site operating techniques.

Table S1.3 Improvement programme requirements Reference Requirement Date The operator shall submit a post-commissioning report to the Environment IC1 Within 4 Agency which shall include, but not be limited to: months following the a review of the environmental performance of the facility against the • completion of design parameters set out in the Application; commissioning. a review of the performance of the facility against the conditions of this • permit and the pre-commissioning report proposals; and details of procedures developed during commissioning for achieving • and demonstrating compliance with permit conditions

Table S1.4 Pre-	operational measures
Reference	Pre-operational measures
POC1	At least 2 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall submit a written copy of the site Environmental Management System (EMS) and make available for inspection all documents and procedures which form part of the site EMS. The EMS shall cover all activities at the installation and shall be in accordance with the indicative BAT requirements specified in the Draft Technical Guidance Note for Composting and Aerobic Treatment (Version 1). The EMS shall include the techniques the operator relies upon to manage the operation, accidents (including flooding), closure and decommissioning of the site. The documents and procedures set out in the EMS shall form the written management system referenced in condition 1.1.1 (a) of the permit. No site operations shall commence or waste accepted at the installation unless the Environment Agency has given prior written permission under this condition.
POC2	<ul> <li>At least 8 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall ensure that a review of the design, method of construction and integrity of the proposed site secondary containment and site surfacing is carried out by a qualified structural engineer. The review shall compare the constructed secondary containment and site surfacing against the indicative BAT requirements specified in the Draft Technical Guidance Note for Composting and Aerobic Treatment (Version 1) and CIRIA C736 – Containment Systems for the Prevention of Pollution – secondary, tertiary and other measures for industrial and commercial premises or other relevant industry standard. The review shall include:</li> <li>physical condition of the secondary containment and site surfaces;</li> <li>the suitability for providing containment when subjected to the dynamic and static loads caused by catastrophic tank failure;</li> </ul>

Reference	Pre-operational measures
	<ul> <li>any work required to ensure compliance with the standards set out in the above technical guidance documents; and</li> </ul>
	a preventative maintenance and inspection regime
	A written report of the review shall be submitted to the Environment Agency detailing the review's findings and recommendations. Remedial action shall be taken to ensure that the secondary containment and site surfacing meet the standards set out in the guidance documents and implement the maintenance and inspection regime.
	No site operations shall commence or waste accepted at the facility unless the Environment Agency has given prior written permission under this condition.
POC3	At least 8 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall provide a written commissioning plan (including timescales for completion) for approval by the Environment Agency. The commissioning plan shall include, but not limited to:
	<ul> <li>the expected emissions to the environment during the different stages of commissioning;</li> </ul>
	<ul> <li>the details of building smoke-testing;</li> </ul>
	<ul> <li>the expected durations of commissioning activities; and</li> </ul>
	<ul> <li>the measures to be taken to protect the environment and report to the Environment Agency in the event that actual emissions exceed expected emissions.</li> </ul>
	Commissioning shall be carried out in accordance with the commissioning plan as approved by the Environment Agency.
	No site operations shall commence or waste accepted at the installation unless the Environment Agency has given prior written permission under this condition.
POC4	At least 8 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall undertake a background sampling of bioaerosols to inform future monitoring requirements. The sampling shall be as agreed in writing with the Environment Agency.
	No site operations shall commence or waste accepted at the installation unless the Environment Agency has given prior written permission under this condition.
POC5	At least 4 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of commissioning of the installation, the operator shall submit the final site drainage plan to the Environment Agency for approval. The plan shall include details of:
	<ul> <li>the site surface water flow and destination within the yard area;</li> </ul>
	<ul> <li>the movement of building roof water; and</li> </ul>
	the details of site monitoring procedures to ensure that no contaminated site surface water is released from the site into the environment.
POC6	At least 4 weeks (or any other date as agreed with the Environment Agency) prior to the commencement of site operations, the operator shall undertake an initial baseline monitoring of the proposed biofilter to inform future monitoring requirements. The sampling shall be as agreed in writing with the Environment Agency.
	No site operations shall commence or waste accepted at the installation unless the Environment Agency has given prior written permission under this condition.

# Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Fuel oil	Sulphur content not exceeding 0.1 per cent

Maximum quantity	Annual throughput shall not exceed 36,000 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	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 - vegetables, fruit and other crops	
02 01 02	animal tissue waste	
02 01 03	plant tissue waste	
02 01 06	animal faeces, urine, manure (including spoiled straw) only	
02 01 07	wastes from forestry	
02 01 99	residues from commercial mushroom cultivation	
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin	
02 02 01	sludges from w <mark>ashi</mark> ng and cleaning	
02 02 02	animal tissue w <mark>ast</mark> e	
02 02 03	materials unsuitable for consumption or processing	
02 02 04	sludges from on-site effluent treatment	
02 02 99	sludges from gelatine production, animal gut contents	
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation	
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation	
	sludges from washing, cleaning, peeling, centrifuging and separationmaterials unsuitable for consumption or processing	
02 03 04		
02 03 04 02 03 05	materials unsuitable for consumption or processing	
02 03 04 02 03 05 02 03 99	materials unsuitable for consumption or processing sludges from on-site effluent treatment sludge from production of edible fats and oils to include seasoning residues,	
02 03 01 02 03 04 02 03 05 02 03 99 02 04 02 04 03	materials unsuitable for consumption or processing sludges from on-site effluent treatment sludge from production of edible fats and oils to include seasoning residues, molasses residues, residues from production of potato, corn or rice starch	

Table 52.2 Permitte	d waste types and quantities for thermophilic aerobic digestion
Maximum quantity	Annual throughput shall not exceed 36,000 tonnes.
Exclusions	<ul> <li>Wastes having any of the following characteristics shall not be accepted:</li> <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 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing
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
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
02 07 02	wastes from spirits distillation
02 07 04	materials unsuitable for consumption or processing
02 07 05	sludges from on-site effluent treatment
02 07 99	spent grains, hops and whisky filter sheets/ cloths, yeast and yeast like residues, sludge from production process
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 03	wastes from pulp, paper and cardboard production and processing
03 03 02	green liquor sludge
03 03 08	paper and cardboard – not allowed if any non-biodegradable coating or preserving substance present
03 03 10	fibre rejects, fibr <mark>e-, f</mark> iller- and coating-sludges from mechanical separation
04	Wastes from the leather, fur and textile industries
04 01	wastes from the leather and fur industry
04 01 01	fleshings and lime split wastes
04 01 05	tanning liquor free of chromium
04 01 07	sludges not containing chromium
04 02	wastes from the textile industry
04 02 10	organic matter from natural products e.g. grease, wax
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging – not allowed if any non-biodegradable coating or preserving substance present. Excludes laminates such as Tetrapaks.
15 01 02	biodegradable plastic packaging - must be independently certified to BS EN 13432
15 01 03	untreated wooden packaging – not allowed if any non biodegradable coating or

Maximum quantity	Annual throughput shall not exceed 36,000 tonnes.
Exclusions	<ul> <li>Wastes having any of the following characteristics shall not be accepted:</li> <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
	preserving substance present
15 01 05	composite packaging – must conform to BS EN 13432 and not allowed if any non biodegradable coating or preserving substance present
16	Wastes not otherwise specified in the list
16 10	aqueous liquid wastes destined for off-site treatment
16 10 02	liquor/leachate from a composting process that accepts waste input types listed in this table, Table S2.2 only
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 03	waste types listed in this table, Table S2.2, that have been mixed together only
19 02 06	sludge types from waste listed in this table, Table S2.2, that have been heat treated only
19 05	wastes from aerobic treatment of solid wastes
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 a composting process that accepts waste input types listed in this permit only)
19 06	wastes from anaerobic treatment of waste
19 06 03	liquor from anaerobic treatment of municipal waste (from a process that treats wastes listed in this permit only)
19 06 04	digestate from anaerobic treatment of municipal waste (derived from source segregated municipal waste only)
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 08	wastes from waste water treatment plants not otherwise specified
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 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 (and only including wastes types listed in this permit only)
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)

Table S2.2 Permitte	d waste types and quantities for thermophilic aerobic digestion				
Maximum quantity	Annual throughput shall not exceed 36,000 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 01	paper and cardboard (excluding veneers, plastic coatings or laminates)				
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				
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 – only separately collected biodegradable wastes of types listed within this table, Table S2.2				
20 03 02	waste from markets, allowed only if source segregated fractions e.g. plant material, fruit and vegetables				

# 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
Biofilter stack (Number 1) on site plan in schedule 7	Biofilter units	No parameter set	No limit set			

Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference Monitoring period frequency	Monitoring standard or method
S1 on site plan in schedule 7 emission to off- site lagoon	Uncontaminated site surface water from waste reception and treatment building roofs	Oil, grease or biological matter	No visible trace present		Visual assessment

Table S3.3 Process mon	itoring requirements			
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Internal for each sealed digester tank	Temperature	At least weekly	Temperature probe	Monitoring equipment shall be
	Moisture	As stated in the Application	As stated in the Application	available on site and used as required to maintain aerobic conditions and ensure compliance with this permit. Equipment shall be calibrated on a 4 monthly basis or as agreed in writing by the Environment Agency.
Biofilter units	Temperature	Monthly	Temperature probe	Biofilter shall be checked and
	Moisture	Monthly	None specified	maintained as specified to ensure appropriate
	Thatching/compaction	Monthly	None specified	temperature and moisture content.
Waste reception and Treatment building;	Odour	Daily	Olfactory monitoring	Odour detection at the site boundary

storage and treatment tanks				
Storage and treatment tanks	Integrity checks	Weekly	Visual assessment	

Table S3.4 Bioa	aerosol monitor	ring requirements			
Location or description of point of measurement	Parameter	Bioaerosol threshold limits (cfu m <sup>-3</sup> )	Monitoring frequency	Monitoring standard or method	Other specifications
At a minimum of three separate locations, as described in the Industry Standard	Gram- negative bacteria	300	Quarterly	In accordance with the Industry Standard Protocol, and, for gram-negative bacteria, together with the Environment	As described in the Industry Standard Protocol, including all the additional data requirements
	I otal bacteria	1000		Agency's "Guidance on the evaluation of bioaerosol risk assessments for composting	specified therein.
	Aspergillus Fumigatus	500	0	facilities"	



# Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data				
Parameter	Emission or monitoring point/reference	Reporting period	Period begins	
Bioaerosols monitoring	As specified in the	Every 4 months or	1January, 1 May,	
Parameters as required by condition 3.6.1	Standardised Protocol and in agreement with the Environment Agency	as agreed in writing by the Environment Agency	1 September	
Biofilter efficiency	Biofilter units	Bi-annual in the	1 January	
Parameters as required by condition 4.2.6		first year of operation, then every 12 months		

Table S4.2 Annual production/treatment		
Parameter		Units
Processed digestate		tonnes or m <sup>3</sup>
Recovered oil		tonnes or m <sup>3</sup>

Table S4.3 Performance parame	eters	
Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes or m <sup>3</sup>
Energy usage	Annually	MWh
Total raw material used	Annually	tonnes

Table S4.4 Reporting forms			
Media/parameter	Reporting format	Date of form	
Bioaerosols	As specified in the Industry Standard Protocol or other form as agreed in writing by the Environment Agency	DD/MM/YY	
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY	
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY	
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY	
Waste Returns	E-waste Returns Form		

# Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

## Part A

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

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution

To be notified within 24 hours of	detection
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

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

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

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

# Part B – to be submitted as soon as practicable

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

\* authorised to sign on behalf of the operator

# Schedule 6 – Interpretation

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

"animal waste" means any waste consisting of animal matter that has not been processed into food for human consumption. This does include blood, feathers, uncooked butcher waste and any other animal waste that is not catering waste or former foodstuffs. This does not include faecal matter from animals (e.g. chicken litter or farmyard manure).

"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.

"bioaerosol threshold limits" means the maximum acceptable bioaerosol concentrations at the nearest sensitive receptor, or at an equivalent distance downwind of the composting operations, which are attributable to the composting operations. The maximum acceptable concentrations are respectively 300, 1000 and 500 cfu m<sup>-3</sup> for gram-negative bacteria, total bacteria and Aspergillus fumigatus.

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

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

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

"emissions to land" includes emissions to groundwater.

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

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

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

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

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

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

"pests" means Birds, Vermin and Insects.

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

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

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

(a) no liquid will run off the surface otherwise than via the system;

(b) except where they may be lawfully be discharged to foul sewer, all liquids entering the system are collected in a sealed sump.

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

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

"year" means calendar year ending 31 December.

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

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

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

## Schedule 7 – Site plan



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END OF PERMIT

Permit Number:	EPR/YP	3938WV	Operator:	Welland Waste Management Ltd
Facility:	Pebble Facility	Hall Farm TAD	Form Number:	WaterUsage1 / DD/MM/YY
Reporting of Water Us	age for the ye	ar		
Water Source		Usage (m <sup>3</sup> /year)		Specific Usage (m <sup>3</sup> /unit output)
Mains water				
Site borehole				
River abstraction				
TOTAL WATER USAGE				
Operator's comments:				
Signed		Date		
(authorised to sign as representat	ive of Operator)			

Permit Number:	EPR/YP3938WV	Operator:	Welland Waste Management Ltd
Facility:	Pebble Hall Farm TAD Facility	Form Number:	Energy1 / DD/MM/YY

Reporting of Energy Usage for the year

Energy Source	Energy Usage			Specific Usage (MWh/unit output)
	Quantity	Primary Ener	gy (MWh)	
Electricity *	MWh			
TOTAL	-			

\* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments:	
Signed	Date
Signed	
(Authorised to sign as representative of Operator)	

Permit Number:	EPR/YP3938WV	Operator:	Welland Waste Management Ltd
Facility:	Pebble Hall Farm TAD Facility	Form Number:	Performance1 / DD/MM/YY

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

Parameter	Units
Total raw material used	tonnes
Operator's comments:	
Signed Date	