

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

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New Earth Solutions (West) Limited

Avonmouth MBT Facility  
Kings Weston Lane  
Avonmouth  
Bristol  
BS11 9FG

**Variation application number**

EPR/EP3590SJ/V007

**Permit number**

EPR/EP3590SJ

# Avonmouth MBT Facility

## Permit number EPR/EP3590SJ

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

This Permit allows the operator to operate a Mechanical Biological Treatment (MBT) including a heat treatment facility at a specified location.

The Mechanical Biological and Heat Treatment facility will be able to process 250,000 tonnes of waste per year.

The permitted wastes for treatment at the facility include municipal and similar waste from commercial sources that are subjected to mechanical treatment including shredding, screening, crushing, sorting and baling followed by biological treatment of the degradable fraction consisting of aerobic composting for the purpose of recovery.

The MBT process is carried out on impermeable hard standing within purpose built buildings.

This Permit does not allow the burning of any wastes, either in the open, inside buildings or in any form of incinerator.

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 EPR/EP3590SJ/A001	Duly made 27/11/2009	Application to operate a mechanical biological treatment facility. (EAWML 101145)
Permit determined EPR/EP3590SJ	14/04/2010	Original permit issued to New Earth Solutions (West) Limited
Variation application EPR/EP3590SJ/V002	Date authorisation was signed 02/02/2012	Agency initiated variation to add condition relating to pests
Variation determined EPR/EP3590SJ	23/02/2012	Varied permit issued
Part surrender application EPR/EP3590SJ/S003	Duly made 25/04/2012	Partial surrender of part of the permitted area where operations have not commenced

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Partial Surrender of permit EPR/EP3590SJ	19/06/2012	Part surrender complete
Variation application EPR/EP3590SJV004	Returned 06/08/2012	Applied for minor technical variation. The application didn't meet the criteria for this.
Application EPR/EP3590SJ/V005 (administrative variation)	Duly made 17/08/2012	Application to vary permit to add EWC codes from chapter 19
Variation determined EPR/EP3590SJ	05/10/2012	Varied permit issued
Application EPR/EP3590SJ/V006	Duly made 10/04/2013	Application to vary permit to increase the total quantity of waste that can be accepted on to site to less than 250,000 tonnes per annum
Variation determined EPR/EP3590SJ	15/05/2013	Varied permit issued
Application EPR/EP3590SJ/V007	Duly made 01/09/2014	Application to vary the waste facility to an installation
Variation determined EPR/EP3590SJ (Billing ref: PP3032WB)	09/10/2015	Variation and consolidation

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/EP3590SJ

### Issued to

**New Earth Solutions (West) Limited** ("the operator")

whose registered office is

**35 Black Moor Road  
Ebbleke Industrial Estate  
Verwood  
Dorset  
BH31 6AT**

company registration number **06968057**

to operate a regulated facility at

**Avonmouth MBT Facility  
Kings Weston Lane  
Avonmouth  
Bristol  
BS11 9FG**

to the extent set out in the schedules.

The notice shall take effect from 09/10/2015

Name	Date
Rebecca Warren	09/10/2015

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/EP3590SJ**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/EP3590SJ/V007 authorising,

**New Earth Solutions (West) Limited** (“the operator”),

whose registered office is

**35 Black Moor Road  
Ebbleake Industrial Estate  
Verwood  
Dorset  
BH31 6AT**

company registration number **06968057**

to operate an installation at

**Avonmouth MBT Facility  
Kings Weston Lane  
Avonmouth  
Bristol  
BS11 9FG**

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

<b>Name</b>	<b>Date</b>
<b>Rebecca Warren</b>	<b>09/10/2015</b>

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.

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

## **3.4 Noise and vibration**

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

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

### **3.5 Monitoring**

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

### **3.6 Pests**

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

### **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 compost operations. This shall include but not be limited to, the

assessment of the efficiency to reduce odours, the summary of maintenance and any recommissioning 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 The Environment Agency shall be notified without delay following the detection of:

- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;
- (b) the breach of a limit specified in the permit; or
- (c) any significant adverse environmental effects.

4.3.4 Any information provided under condition 4.3.3 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.5 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

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

Where the operator is a registered company:

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

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

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

In any other case:

- (e) the death of any of the named operators (where the operator consists of more than one named individual);
- (f) any change in the operator's name(s) or address(es); and
- (g) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.7 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

4.3.8 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

## **4.4 Interpretation**

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 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	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	<p>From receipt of waste to despatch for other on-site operations (aerobic composting, anaerobic digestion and/or bio-drying) and recovery of by-products.</p> <p>Biological treatment of waste consisting of aerobic composting, anaerobic digestion and/or bio-drying for the purpose of recovery.</p> <p>Treatment of waste in closed buildings/vessels fitted with appropriate odour abatement.</p> <p>Waste types suitable for acceptance are limited to those specified in Table S2.2.</p> <p>Waste must be kept on an impermeable surface with sealed drainage. All bulking, transfer and treatment of waste must be carried out on an impermeable surface with sealed drainage.</p>
<b>Directly Associated Activity</b>			
A2	Storage of waste pending recovery	R13: Storage of waste pending the operations numbered R1 and R3 (excluding temporary storage, pending collection, on the site where it is produced)	<p>From the receipt of waste to despatch for treatment or despatch off site for recovery and/or disposal.</p> <p>Storage of waste (including RDF and recyclables) in an enclosed building fitted with appropriate odour abatement and on an impermeable surface with sealed drainage system.</p> <p>Waste types suitable for acceptance are limited to those specified in Table</p>

<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>
			S2.2. Activity undertaken in relation to A1
A3	Physical treatment for the purposes of recycling.	<p>R3: Recycling/reclamation of organic substances which are not used as solvents</p> <p>R4: Recycling/reclamation of metals and metal compounds</p> <p>R5: Recycling/reclamation of other inorganic compounds</p>	<p>From the receipt of waste to despatch for biological treatment or despatch off site for recovery.</p> <p>Treatment of waste in enclosed building and on an impermeable surface with sealed drainage system including screening, sorting, crushing, baling, shredding and pelletising.</p> <p>Post-treatment of compost and/or digestate in an enclosed building and on an impermeable surface with sealed drainage system, including screening to remove contraries.</p> <p>Physical treatment including screening, crushing, baling, shredding and pelletising for the purpose of recovery.</p> <p>Heat treatment (pasteurisation) of waste in 1 tank for the purpose of recovery.</p> <p>Gas cleaning by biological or chemical scrubbing.</p> <p>Waste types suitable for acceptance are limited to those specified in Table S2.2.</p> <p>Activity undertaken in relation to A1</p>
A4	Surface water collection and storage	Collection and storage of uncontaminated roof and site surface water in 1 attenuation pond.	<p>From the collection of uncontaminated roof and site surface water from non operational areas only to re-use within the facility or discharge off-site.</p> <p>Undertaken in relation to</p>

<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>
			Activity A1
A5	Raw material storage	Storage of raw materials including lubrication oil, antifreeze, sulphuric acid and diesel.	From the receipt of raw materials to despatch for use within the facility. Undertaken in relation to Activity A1
A6	Compost storage	Collection and storage of Compost like output.	From the receipt of processed compost produced at the facility to despatch for use off-site.  Activity undertaken in relation to A1.
A7	Process water storage	Collection in tanks for storage.	From the receipt of compost leachate produced at the facility to despatch off site for recovery or disposal.  Activity undertaken in relation to A1.

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application	Document 424.4.1 BZ EPR H1 ERA and Section E Non Technical Summary in response to section 5a – technical standards , Part B of the application form and any revisions of these documents.	03/11/2009
Application	Fugitive Emissions, noise and Odour management plan reference 424.4.1 BZ EPR H1 ERA in response to section 5B, Table 3 – General Requirements, Part B of the application form and any revisions of these documents.	03/11/2009



## 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 MBT Mechanical Biological Treatment Facility	
Maximum Quantity	The total quantity of waste accepted at the site shall be less than 250,000 tonnes per year.
<b>Exclusions</b> Wastes having any of the following characteristics shall not be accepted: <ul style="list-style-type: none"> <li>• Consisting solely or mainly of dusts, powders or loose fibres;</li> <li>• Sludges (except gully and street cleaning wastes)</li> <li>• Liquids</li> <li>• Drummed wastes</li> <li>• Animal By-Products contaminated material – unless the plant has been approved by the competent authority, which is Animal Health</li> </ul>	
Waste code	Description
<b>15</b>	<b>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
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
<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 05</b>	<b>Wastes from aerobic treatment of solid wastes</b>
19 05 01	Non-composted fraction of municipal and similar wastes
19 05 03	Off-specification compost
19 05 99	Wastes not otherwise specified (that is – screened biofines post mechanical treatment; and biofines completely or partially biologically treated to produce a compost-like-output only)
<b>19 08</b>	<b>Wastes from waste water treatment plants not otherwise specified</b>
19 08 05	Sludges from treatment of urban waste water
19 08 12	Sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11

19 12	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 01	Paper and cardboard
19 12 02	Ferrous metal
19 12 03	Non-ferrous metal
19 12 04	Plastic and rubber
19 12 07	Wood other than wood containing dangerous substances
19 12 10	Combustible waste (refuse derived fuel)
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
<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
20 01 02	Glass
20 01 08	Biodegradable kitchen and canteen waste
20 01 10	Clothes
20 01 11	Textiles
20 01 38	Wood other than mentioned in 20 01 37
20 01 39	Plastics
20 01 40	Metals
<b>20 02</b>	<b>Garden and park wastes (including cemetery waste)</b>
20 02 01	Biodegradable wastes
20 02 02	Soil and stones
<b>20 03</b>	<b>Other municipal wastes</b>
20 03 01	Mixed municipal waste
20 03 02	Waste from markets
20 03 03	Street cleaning residue

## Schedule 3 – Emissions and monitoring

<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>
Internal for each windrow	Temperature	Continuous	Temperature probe	Monitoring equipment must be available on-site and used as required to ensure compliance with the conditions of this permit.
	Oxygen	Daily (Monday to Friday)		
	Moisture	Daily (Monday to Friday)		
Bio filter	Temperature	As required	Thermocouple Probe and moisture meter or touch test	Bio filters should be checked and maintained to ensure appropriate temperature and moisture content on a daily basis
	Moisture			
	Thatching/compaction			

<b>Location or description of point of measurement</b>	<b>Parameter</b>	<b>Threshold limit CFU m<sup>-3</sup></b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Upwind of the boundary of the operational area at approximately 50m	Gram-negative bacteria	300	Quarterly for the first year of operation and then twice a year unless otherwise agreed in writing with the Agency.	In accordance with the Industry Standard Protocol, and, for gram-negative bacteria, together with the Environment Agency's "Guidance on the evaluation of bioaerosol risk assessments for composting facilities"	As described in the Industry Standard Protocol, including all the additional data requirements specified therein.
	Total bacteria	1000			
Downwind of the site at an equal distance from the boundary of the operational area as the nearest sensitive receptor	Aspergillus Fumigatus	500			
Adjacent to the nearest sensitive receptor					

## Schedule 4 – Reporting

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

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Bioaerosols monitoring Parameters as required by condition 3.5.1	As specified in schedule 3, table S3.2	Every 6 months or as agreed in writing by the Environment Agency	1 January, 1 July.
Biofilter efficiency Parameters as required by condition 4.2.6	Biofilter(s)	Every 12 months	1 January

<b>Table S4.2: Annual production/treatment</b>	
<b>Parameter</b>	<b>Units</b>
Processed compost	tonnes

<b>Table S4.3 Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Raw material usage	Annually	tonnes

<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	09/10/15
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	09/10/15
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	09/10/15
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	09/10/15
Waste returns	E-waste returns	--

# 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.

“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.

“Best available treatment, recovery and recycling techniques” shall have the meaning given to it in the document published jointly by the Department for Environment, Food and Rural Affairs, the Welsh Assembly Government and the Scottish Executive on 27th November 2006, entitled “Guidance on Best Available Treatment, Recovery and Recycling Techniques (BATRRT) and Treatment of Waste Electrical and Electronic Equipment (WEEE).

“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.

“compost” means solid particulate material that is the result of composting, which has been sanitised and stabilised, and which confers beneficial effects when added to soil, used as a component of growing media or used in another way in conjunction with plants.

“compostable plastics” means plastics that are certified to meet the standards of EN 13432, EN 14995 or equivalent.

“composting batch” means an identifiable quantity of material that progresses through the composting system and when fully processed has similar characteristics throughout. For composting systems that operate on a continuous or a plug-flow basis, batches will be taken to mean a series of “portions of production”.

“composting” means the biological decomposition of organic materials, under conditions that are predominantly aerobic and that allow the development of thermophilic temperatures as a result of biologically produced heat and that result in compost.

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

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

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

“emissions to land” includes emissions to groundwater.

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

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

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

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

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

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“pests” means Birds, Vermin and Insects.

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

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

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

- no liquids will run off the surface otherwise than via the system
- all liquids entering the system are collected in a sealed sump, except where liquids may be lawfully discharged to foul sewer.

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

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

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

“year” means calendar year ending 31 December.

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

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

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



# Schedule 7 – Site plan





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END OF PERMIT

**Permit Number: EP3590SJ                      Operator: New Earth Solutions  
 Facility: Avonmouth MBT                      Form Number: (West) Limited  
 Air1 / 09/10/15**

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

<b>Emission Point</b>	<b>Substance / Parameter</b>	<b>Emission Limit Value</b>	<b>Reference Period</b>	<b>Result [1]</b>	<b>Test Method [2]</b>	<b>Sample Date and Times [3]</b>	<b>Uncertainty [4]</b>

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the ‘minimum – maximum’ measured values. 2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed .....

Date.....

(Authorised to sign as representative of Operator)

**Permit Number: EP3590SJ**  
**Facility: Avonmouth MBT**

**Operator: New Earth Solutions (West) Limited**  
**Form Number: WaterUsage1 / 09/10/15**

**Reporting of Water Usage for the year**

<b>Water Source</b>	<b>Usage (m<sup>3</sup>/year)</b>	<b>Specific Usage (m<sup>3</sup>/unit output)</b>
Mains water		
<b>TOTAL WATER USAGE</b>		

Operator's comments:

Signed .....  
(authorised to sign as representative of Operator)

Date.....

**Permit Number: EP3590SJ**                      **Operator: New Earth Solutions (West) Limited**  
**Facility: Avonmouth MBT**                      **Form Number: Energy1 / 09/10/15**

**Reporting of Energy Usage for the year**

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

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

Operator's comments:

Signed .....

Date.....

(Authorised to sign as representative of Operator)

**Permit Number: EP3590SJ**

**Operator: New Earth Solutions  
(West) Limited**

**Facility: Avonmouth MBT**

**Form Number:**

**Performance1 / 09/10/15**

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

<b>Parameter</b>	<b>Units</b>
Total raw material used	tonnes
CHP engine usage	hours
CHP engine efficiency	%
Auxiliary boiler usage	hours
Emergency flare operation	hours
Electricity exported	MWh
Biomethane exported	tonnes or m <sup>3</sup>

Operator's comments:

Signed .....

Date.....

(Authorised to sign as representative of Operator)