

# Notice of variation and consolidation with introductory note

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

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Environcom (North West) Limited  
West Midlands Recycling Centre  
Rufford Street  
Lye  
Stourbridge  
West Midlands  
DY9 7DP

**Variation application number**

EPR/BB3109LT/V002

**Permit number**

EPR/BB3109LT

# West Midlands Recycling Centre

## Permit number EPR/BB3109LT

### 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”.

Environcom (North West) Limited operates a Waste Electronic Electrical Equipment (WEEE) recycling facility at West Midlands Recycling Centre, Rufford Street, Stourbridge. The site can accept WEEE products including fridges, freezers, cookers and small domestic appliances (SDA). Products identified as suitable for reuse are sent to a different facility for refurbishment. Products unsuitable for reuse are processed at the facility.

The facility is permitted to accept up to 30,000 tonnes per year of hazardous and up to 44,999 tonnes per year of non-hazardous waste.

Recycling of SDA comprises manual dismantling and removal of components containing hazardous substances if required; following this, the waste SDA are shredded and separated into fractions for recovery. Fridges and freezers are processed by degassing (stage 1 pre-destruction) followed by shredding and fraction segregation (stage 2 destruction). Other large domestic appliances such as electric cookers and washing machines are inspected for hazardous elements which are removed, wires and plugs are cut, and the appliances are then stored prior to removal off-site for further processing.

The activities undertaken at the facility include physico-chemical treatment of hazardous waste, and the temporary storage of hazardous waste for recovery. These activities have been varied to installation activities under the Environmental Permitting (England and Wales)(Amendment) Regulations 2013 Schedule 1 Part 2:

- Section 5.3 Part A(1) a) (ii) ‘*Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment*’; and
- Section 5.6 ‘*Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending any of the activities listed in Sections 5.1, 5.2 and 5.3*’.

This variation also increases the permitted storage volumes for polyurethane (PUR) foam, ferrous metal, non ferrous metal, and plastic.

In addition to the above installation activities, the facility can undertake treatment of non-hazardous WEEE, temporary storage of non-hazardous waste for recovery, and compaction of waste cardboard in a baler for onward sale as a raw material. These activities have not been varied to installations but remain waste operations.

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>
Permit determined EAWML 46202	08/06/06	Original permit issued to Overton Recycling Limited
Agency initiated modification EAWML 46202 EPR/WP3499CV	07/11/08	WEEE modification
Transfer determined EPR/BB3109LT	14/01/14	Full transfer of permit EPR/WP3499CV to Environcom (North West) Limited complete.
Application EPR/BB3109LT/V002 (variation and consolidation)	Duly made 23/12/14	Application to vary and update the permit to IED conditions.
Variation determined EPR/BB3109LT (Ref EAWML 46202) (Billing ref: HP3737WW)	09/08/2016	Varied and consolidated permit issued in modern condition format.

End of introductory note

# Notice of variation and consolidation

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

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

### Permit number

EPR/BB3109LT

### Issued to

**Environcom (North West) Limited** (“the operator”)

whose registered office is

**Spittlegate Level**

**Grantham**

**Lincolnshire**

**NG31 7UH**

company registration number **06472943**

to operate a regulated facility at

**West Midlands Recycling Centre**

**Rufford Street**

**Lye**

**Stourbridge**

**West Midlands**

**DY9 7DP**

to the extent set out in the schedules.

The notice shall take effect from 09/08/2016

Name	Date
Rebecca Warren	09/08/2016

Authorised on behalf of the Environment Agency

## **Schedule 1**

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

## **Schedule 2 – consolidated permit**

Consolidated permit issued as a separate document.

# Permit

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

### Permit number

**EPR/BB3109LT**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BB3109LT/V002 authorising,

**Environcom (North West) Limited** (“the operator”),

whose registered office is

**Spittlegate Level**

**Grantham**

**Lincolnshire**

**NG31 7UH**

company registration number **06472943**

to operate an installation and waste operations at

**West Midlands Recycling Centre**

**Rufford Street**

**Lye**

**Stourbridge**

**West Midlands**

**DY9 7DP**

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

<b>Name</b>	<b>Date</b>
<b>Rebecca Warren</b>	<b>09/08/2016</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 For the following activities referenced in schedule 1, table S1.1 (A1 to A5) 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 For the following activities referenced in schedule 1, table S1.1 (A1 to A5) 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, tables S1.2 to S1.5, 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, tables S1.2 to S1.5, 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 All activities shall take place on impermeable surface with sealed drainage, unless otherwise specified in table S1.1 or agreed in writing with the Environment Agency.
- 2.3.4 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.5 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 tables S2.2, S2.3 and S2.4; and
  - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.6 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.
- 2.3.7 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.
- 2.3.8 For the activity referenced as A1 in schedule 1, table S1.1 where any of the following situations arise, the operator shall, as soon as is practicable, cease the treatment of waste until normal operation can be restored:



- (a) failure of the contained environment; or
  - (b) breach of a relevant Lower Explosive Limit (LEL) or Limiting Oxygen Concentration (LOC).
- 2.3.9 Following the cessation of treatment under condition 2.3.8 the operator shall not recommence treatment unless:
- (a) the failed equipment is repaired and brought back into normal operation; and
  - (b) gas concentrations remain below any relevant lower explosive limit or limiting oxygen concentration.

## **2.4 Hazardous waste storage and treatment**

- 2.4.1 Hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.

## **2.5 WEEE storage and treatment**

- 2.5.1 Spillage collection facilities and, where appropriate, decanters and cleanser-degreasers shall be provided and used as necessary.
- 2.5.2 WEEE, disassembled spare parts, components and residues shall be stored in areas provided with a weatherproof covering where appropriate or in containers providing a weatherproof covering where appropriate.
- 2.5.3 WEEE shall be treated using best available treatment, recovery and recycling techniques (BATRRRT).
- 2.5.4 All fluids contained within any WEEE shall be removed prior to further treatment.
- 2.5.5 As a minimum, the substances, preparations and components specified in table S1.3 shall be removed from any separately collected WEEE.
- 2.5.6 Separately collected components of WEEE specified in table S1.4 shall be treated in accordance with the methods specified in that table.
- 2.5.7 Any liquids including those in disassembled spare parts, batteries, capacitors containing PCBs/PCTs and any other hazardous waste shall be stored in suitable sealed and labelled containers.
- 2.5.8 Equipment shall be provided and used to record the weight of untreated WEEE accepted at, and components and materials leaving the site.

## **2.6 Refrigerator unit pre-destruction and destruction**

- 2.6.1 The dismantling and destruction of refrigerator units shall take place in accordance with table S1.5.

## **2.7 Improvement programme**

- 2.7.1 The operator shall complete the improvements specified in schedule 1 table S1.6 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.7.2 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.

## **2.8 Pre-operational conditions**

- 2.8.1 The operations specified in schedule 1 table S1.7 shall not commence until the measures specified in that table have been completed.

### **3 Emissions and monitoring**

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

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

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

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

#### **3.3 Odour**

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 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) point source emissions specified in tables S3.1 and S3.2;
  - (b) ambient air monitoring specified in table S3.3; and
  - (c) process monitoring specified in table S3.4.
- 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 table S3.1 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, hazard or annoyance 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 For the following activities referenced in schedule 1, table S1.1 (A1 to A5) a report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
- (b) the annual production /treatment data set out in schedule 4 table S4.2; and
- (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

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

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

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

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

## 4.3 Notifications

- 4.3.1 For the following activities referenced in schedule 1, table S1.1 (A1 to A5), 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 For the following activities referenced in schedule 1, table S1.1 (A6), 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.

4.3.9 Where the operator has entered into a climate change agreement with the Government, the Environment Agency shall be notified within one month of:

- (a) a decision by the Secretary of State not to re-certify the agreement;
- (b) a decision by either the operator or the Secretary of State to terminate the agreement; and
- (c) any subsequent decision by the Secretary of State to re-certify such an agreement.

## **4.4 Interpretation**

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

4.4.2 For the following activities referenced in schedule 1, table S1.1 (A1 to A5) 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.

4.4.3 For the following activities referenced in schedule 1, table S1.1 (A6) in this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

# Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types
A1 Fridge stage 1 and stage 2 treatment	S5.3 A(1) (a) (ii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment.	R3: Recycling/reclamation of organic substances which are not used as solvents  R4: Recycling/reclamation of metals and metal compounds  R5: Recycling/reclamation of other inorganic materials	Treatment of refrigeration units consisting of sorting, separation, grading, shredding, baling, compacting, crushing, granulation, cutting, condensing, and degassing in line with the standards in Tables S1.3, S1.4 and S1.5.  Treatment of refrigeration units shall be carried out within a building provided with weatherproof covering.  Buildings, covered areas or containers shall meet the following requirements: <ul style="list-style-type: none"><li>• buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water;</li><li>• rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids;</li><li>• containers containing waste shall be stored on an impermeable surface with sealed drainage system.</li></ul> Waste types suitable for acceptance are limited to those specified in Table S2.2.
A2 Hazardous WEEE treatment	S5.3 A(1) (a) (ii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment	R3: Recycling/ reclamation of organic substances which are not used as solvents  R4: Recycling/ reclamation of metals and metal compounds  R5: Recycling/reclamation of other inorganic materials	Mechanical treatment of hazardous WEEE consisting of sorting, separation, shredding, screening, grading, baling, shearing, compacting, crushing, granulation or cutting for the purpose of recovery of constituent parts and materials.  Treatment of WEEE shall be carried out within a building provided with weatherproof covering.  Buildings, covered areas or containers shall meet the following requirements: <ul style="list-style-type: none"><li>• buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water;</li></ul>

<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>
			<ul style="list-style-type: none"> <li>rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids;</li> <li>containers containing waste shall be stored on an impermeable surface with sealed drainage system.</li> </ul> <p>Waste types suitable for acceptance are limited to those specified in Table S2.3.</p>
A3	Section 5.6 A(1)(a) Temporary storage of hazardous waste in a facility with a total capacity exceeding 50 tonnes pending any of the activities listed in Section 5.1, 5.2 and 5.3	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	<p>Storage of refrigerants, compressor oil, blowing agents and hazardous components from WEEE treatment.</p> <p>Storage of refrigeration units and hazardous WEEE:</p> <ul style="list-style-type: none"> <li>Refrigeration units shall not be stored for more than 3 months without prior written approval from the Environment Agency.</li> <li>Free storage of refrigeration units shall not exceed a maximum storage height of 3.5 metres.</li> </ul> <p>Wastes shall be stored for no longer than 6 months.</p> <p>Buildings, covered areas or containers shall meet the following requirements:</p> <ul style="list-style-type: none"> <li>buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water;</li> <li>rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids;</li> <li>containers containing waste shall be stored on an impermeable surface with sealed drainage system.</li> </ul> <p>Waste types suitable for acceptance are limited to those specified in Table S2.2 and S2.3.</p>
<b>Directly Associated Activity</b>			
A4	Storage of processed materials, excluding temporary storage of hazardous waste	R13: Storage of waste pending the operations numbered R1 to R12 (excluding temporary	<p>From storage of processed materials to despatch off site for recovery.</p> <p>Storage of recovered fractions and</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>
	under Section 5.6 A(1)(a)	storage, pending collection, on the site where it is produced)	shredder residue following treatment. Storage of residual materials resulting from pre-destruction and destruction processing shall not exceed the limits specified in Table S1.8.
A5	Raw materials storage	Storage of raw materials including, nitrogen, lubricating oil and diesel.	From the receipt of raw materials to despatch for use within the facility
<b>Activity reference</b>	<b>Description of activities for waste operations</b>		<b>Limits of activities</b>
A6	<p>R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p> <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>Storage and treatment of non-hazardous WEEE, baling of cardboard packaging waste generated from site operations, and storage of non-hazardous waste pending dispatch off-site for the purpose of recovery.</p> <p>Treatment operations shall be limited to:</p> <ul style="list-style-type: none"> <li>• Treatment consisting only of sorting, dismantling, separation, shredding, screening, grading, baling, shearing, compacting, crushing, granulation, repair or refurbishment, or cutting of non-hazardous WEEE waste into different components for recovery.</li> <li>• Baling of cardboard packaging waste generated on site for dispatch off-site for the purpose of use as a raw material.</li> </ul> <p>Treatment of WEEE shall be carried out within a building provided with weatherproof covering.</p> <p>Buildings, covered areas or containers shall meet the following requirements:</p> <ul style="list-style-type: none"> <li>• buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water;</li> <li>• rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids;</li> <li>• containers containing waste shall be stored on an impermeable surface with sealed drainage system.</li> </ul> <p>Treatment in shredders of non-hazardous metal waste, including WEEE and their components for recovery shall not exceed 75 tonnes per day.</p> <p>Wastes shall be stored for no longer than 3 years prior to recovery.</p> <p>Waste types suitable for acceptance are limited to those specified in Table S2.4.</p>

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application EPR/BB3109LT/V002	Response to section 6 – environmental risk assessment, Part C2 of the application form.	23/12/14
	Environcom Stourbridge Working Plan, provided in response to section 3d – Management systems, Part C2 of the application form.	

<b>Table S1.3 Substances, preparations and components to be removed from separately collected WEEE</b>
<ul style="list-style-type: none"> <li>• Capacitors containing polychlorinated biphenyls in accordance with Council Directive 96/59/EC of 16 September 1996 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT)</li> <li>• Mercury-containing components, such as switches or backlighting lamps</li> <li>• Batteries</li> <li>• Printed circuit boards of mobile phones generally, and of other devices if the surface of the printed circuit board is greater than 10 square centimetres</li> <li>• Toner cartridges, liquid and paste, as well as colour toner</li> <li>• Plastic containing brominated flame retardants</li> <li>• Asbestos waste and components which contain asbestos</li> <li>• Cathode ray tubes</li> <li>• Chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), hydrofluorocarbons (HFC), or hydrocarbons (HC)</li> <li>• Gas discharge lamps</li> <li>• Liquid crystal displays (together with their casing where appropriate) of a surface greater than 100 square centimetres and all those back-lighted with gas discharge lamps</li> <li>• External electric cables</li> <li>• Components containing refractory ceramic fibres as described in Commission Directive 97/69/EC of 5 December 1997 adapting to technical progress for the 23rd time Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances</li> <li>• Components containing radioactive substances with the exception of components that are below the exemption thresholds set in Article 3 of and the Annex I to Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation</li> <li>• Electrolyte capacitors containing “substances of concern” (height &gt; 25mm, diameter &gt; 25mm or proportionately similar volume)</li> </ul>

<b>Table S1.4 Specified Treatment Methods for separately collected components of WEEE</b>	
<b>Component</b>	<b>Specified Treatment</b>
Cathode ray tubes	The fluorescent coating shall be removed
Gas discharge lamps	The mercury shall be removed
Equipment containing gases that are ozone depleting or have a global warming potential (GWP) above 15 such as those contained in foams and refrigeration circuits	The gases must be properly extracted and properly treated. Ozone depleting gases must be treated in accordance with Regulation (EC) No 1005/2009.

<b>Table S1.5 Standards for pre-destruction and destruction of refrigeration units</b>	
<p>Stage 1) Pre-destruction processing of waste refrigeration units</p>	<p>The pre-destruction processing of refrigerator units shall be undertaken in a manner to ensure fugitive emissions from the removal of refrigerant and oil from the refrigeration cooling systems are collected.</p> <p>Drainage of the refrigeration cooling system shall be undertaken in a manner that results in the removal of at least 99% of the refrigerant and the oil from the cooling circuit.</p> <p>Upon removal of compressor oil from the cooling system:</p> <p>The compressor oil shall be processed to ensure that the concentration of refrigerant in the oil is &lt;0.9% w/w; or</p> <p>Where the compressor oil is not processed to remove dissolved refrigerant it shall be placed immediately in a suitable sealed container to prevent fugitive emissions and sent for further refrigerant recovery or destruction.</p> <p>Following the drainage of the cooling system, the compressor unit shall be removed from the refrigerator unit and placed into a suitable container that prevents fugitive emissions.</p> <p>Switches containing mercury or other hazardous components shall be removed from the unit and placed in a suitable container prior to unit destruction.</p> <p>All refrigerator units shall be drained of free water prior to destruction.</p> <p>Insulation panels shall be cut in a way that prevents or where that is not practicable, minimises dust and fugitive loss of blowing agent.</p>
<p>Stage 2) Refrigeration unit carcass and insulation panel destruction</p>	<p>Refrigeration unit carcasses and insulation panels shall not be subject to the destruction process unless processed to the appropriate pre-destruction processing standards specified in Section 1 above.</p> <p>The destruction of the refrigerator unit carcasses and insulation panels shall be undertaken in a contained environment that prevents fugitive losses of the blowing agent.</p> <p>Residual materials resulting from the destruction of refrigeration unit carcasses and insulation panels shall not be removed from the contained environment unless they meet the specified standards below:</p> <ul style="list-style-type: none"> <li>• Metal - The quantity of foam remaining on the granulated metal after processing shall not exceed 0.5% w/w</li> <li>• Plastic - The quantity of foam remaining on the granulated plastic after processing shall not exceed 1% w/w</li> <li>• Foam - The quantity of residual blowing agents remaining in the polyurethane foam shall not exceed: <ul style="list-style-type: none"> <li>– 0.5% w/w where foam is stored in a contained environment subject to further recovery or destruction</li> <li>– 0.2% w/w in other cases</li> </ul> </li> </ul> <p>All waters generated from the destruction operations shall be collected and stored in a sealed container to prevent fugitive emissions prior to disposal and recovery.</p>

<b>Table S1.6 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC1	The operator shall submit a revised written management plan for approval by the Environment Agency to meet all the relevant BAT requirements for activities A1 to A5 detailed in Sector Guidance Note IPPC S5.06 – <i>Guidance for the Treatment of Hazardous and Non</i>	09/02/2017

Table S1.6 Improvement programme requirements		
Reference	Requirement	Date
	<i>Hazardous Waste.</i> In particular, the revised management plan shall include a site plan that clearly identifies material storage areas and capacities, and the facility's point source emission points.	
IC2	<p>A. The operator shall submit a written plan to the Environment Agency for approval that includes:</p> <ul style="list-style-type: none"> <li>(a) proposals to undertake representative monitoring of the air discharged from point A1 in table S3.1 including the parameters to be monitored, frequencies of monitoring and methods to be used;</li> <li>(b) proposals to undertake representative monitoring of the ambient air including the sampling locations, parameters to be monitored, frequencies of monitoring and methods to be used;</li> <li>(b) confirmation that a written report will be submitted to the Environment Agency for approval that includes: <ul style="list-style-type: none"> <li>i) the results of an assessment of the impact of the emission to air from the site using the Environment Agency's 'H1 Environmental Risk Assessment' tool (or equivalent as agreed with the Environment Agency) based on the parameters monitored in (a) above; and</li> <li>ii) proposals for appropriate measures to mitigate the impact of the emission where the assessment determines they are significant, including emissions limits and monitoring and dates for implementation of individual measures; and</li> <li>iii) details of appropriate measures for the operation and maintenance of the abatement system to ensure that where emission limits are proposed they are met or, where emission limits are not required, emissions remain insignificant.</li> </ul> </li> </ul> <p>The operator shall carry out the monitoring in accordance with the Environment Agency's written approval.</p>	6 months following recommencement of the mechanical treatment of hazardous WEEE
	<p>B. The operator shall submit a written plan to the Environment Agency for approval that includes:</p> <ul style="list-style-type: none"> <li>(c) proposals to undertake representative monitoring of the air discharged from point A2 in table S3.1 including the parameters to be monitored, frequencies of monitoring and methods to be used;</li> <li>(d) proposals to undertake representative monitoring of the ambient air including the sampling locations, parameters to be monitored, frequencies of monitoring and methods to be used;</li> <li>(c) confirmation that a written report will be submitted to the Environment Agency for approval that includes: <ul style="list-style-type: none"> <li>iv) the results of an assessment of the impact of the emission to air from the site using the Environment Agency's 'H1 Environmental Risk Assessment' tool (or equivalent as agreed with the Environment Agency) based on the parameters monitored in (a) above; and</li> <li>v) proposals for appropriate measures to mitigate the impact of the emission where the assessment determines they are</li> </ul> </li> </ul>	09/02/2017

<b>Table S1.6 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
	<p>significant, including emissions limits and monitoring and dates for implementation of individual measures; and</p> <p>vi) details of appropriate measures for the operation and maintenance of the abatement system to ensure that where emission limits are proposed they are met or, where emission limits are not required, emissions remain insignificant.</p> <p>The operator shall carry out the monitoring in accordance with the Environment Agency's written approval.</p>	
IC3	<p>The operator shall submit a written monitoring plan to the Environment Agency for approval.</p> <p>The plan must contain proposals for a comprehensive monitoring exercise to demonstrate that the stage 1 and stage 2 processing of refrigeration units and insulation panels does not give rise to fugitive releases to air of refrigerant or blowing agent gases (i.e. CFCs, HCFCs, HFCs or HCs).</p> <p>The operator shall carry out the monitoring exercise and submit a report in accordance with the Environment Agency's written approval.</p> <p>The operator will give the Environment Agency at least fourteen days notice of the commencement of the monitoring exercise.</p> <p>The Environment Agency will be notified immediately if any fugitive releases are detected during the monitoring exercise.</p>	09/02/2017
IC4	<p>The Operator shall submit a written proposal to the Environment Agency to carry out tests to determine the size distribution of the particulate matter in the exhaust gas emissions to air from emission points A1 and A2 in table S3.1, identifying the fractions within the PM<sub>10</sub>, and PM<sub>2.5</sub> ranges. The proposal shall include a timetable for approval by the Environment Agency to carry out such tests and produce a report on the results.</p> <p>On receipt of written agreement by the Environment Agency to the proposal and the timetable, the Operator shall carry out the tests and submit to the Environment Agency a report on the results.</p>	09/02/2017

<b>Table S1.7 Pre-operational measures for future development</b>		
<b>Reference</b>	<b>Operation</b>	<b>Pre-operational measures</b>
1	Mechanical treatment of hazardous WEEE	6 weeks prior to re-commencing operation of the mechanical treatment of hazardous WEEE the operator shall submit to the Environment Agency for approval a written review of the pollution abatement equipment to demonstrate that it reflects the requirements of BATRRT and BAT in accordance with Sector Guidance Note IPPC S5.06 – Guidance for the Treatment of Hazardous and Non Hazardous Waste. Where the review identifies requirements for improvement measures it must contain dates for the implementation of individual measures. The operator shall implement the plan as approved.
2	Mechanical treatment of hazardous WEEE	6 weeks prior to re-commencing operation of the stage 2 refrigeration unit destruction process the operator shall submit to the Environment Agency for approval, and subsequent implementation, revised written operating procedures (and any amendments to them) that accord with section 2.1.4 (waste treatment) of Sector Guidance Note S5.06 – Guidance for the Treatment of Hazardous and Non hazardous Waste, May 2013.

<b>Table S1.8 Permitted quantities of residual materials from stage carcass destruction</b>			
<b>Residual materials</b>	<b>Permitted Waste Categories (equivalent European Waste Catalogue No. given in brackets)</b>	<b>Maximum Permitted Storage Quantities for each waste category</b>	<b>Maximum Permitted storage times for each waste category</b>
i) Compressor oil	13 02 08* other engine, gear and lubricating oils	1,500 litres	6 months
ii) Refrigerants	14 06 01* Chlorofluorocarbons, HCFC, HFC	3,750 kg	6 months
iii) HC refrigerants	14 06 03* other solvents and solvent mixtures		
iv) Blowing agent	14 06 01* Chlorofluorocarbons, HCFC, HFC		
v) HC blowing agents	14 06 03* other solvents and solvent mixtures		
vi) Polyurethane foam	19 12 04 rubber and plastic	50 Tonnes	6 months
vii) Spent activated carbon	06 13 02* spent activated carbon	1 tonne	3 months
viii) Ferrous metal	19 10 01 iron and steel waste	50 Tonnes	12 months
ix) Non-ferrous metal	19 10 02 non-ferrous waste	25 Tonnes	12 months
x) Plastic	19 12 04 rubber and plastic	50 Tonnes	12 months
xi) Rubber	19 12 04 rubber and plastic	2 tonnes	12 months
xii) mercury switches etc	19 10 05* other fractions containing hazardous substances	1 tonne	6 months
xiii) others	19 10 06 other fractions other than those mentioned in 19 10 05	80 Tonnes	12 months

## Schedule 2 – Waste types, raw materials and fuels

Raw materials and fuel description	Specification
Nitrogen	--
Lubricating oil	--
Diesel	--

<b>Maximum Quantities</b>	
The total quantity of hazardous waste accepted at the site shall be less than 30,000 tonnes a 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> </ul>	
Waste Code	Description
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 11*	discarded equipment containing chlorofluorocarbons, HCFC, HFC
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
<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 23*	Discarded equipment containing chlorofluorocarbons
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components

<b>Maximum Quantities</b>	
The total quantity of hazardous waste accepted at the site shall be less than 30,000 tonnes a 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> </ul>	
Waste Code	Description
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 09*	transformers and capacitors containing PCBs

<b>Table S2.3 Permitted Waste types and quantities for hazardous Waste Electrical and Electronic Equipment authorised treatment facility</b>	
<b>Maximum Quantities</b> The total quantity of hazardous waste accepted at the site shall be less than 30,000 tonnes a 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> </ul>	
<b>Waste Code</b>	<b>Description</b>
16 02 10*	discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09
16 02 12*	discarded equipment containing free asbestos
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
16 02 15*	hazardous components removed from discarded equipment
<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 21*	fluorescent tubes and other mercury-containing waste
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components

<b>Table S2.4 Permitted Waste types and quantities for non-hazardous Waste Electrical and Electronic Equipment authorised treatment facility</b>	
<b>Maximum Quantities</b> The total quantity of non-hazardous waste accepted at the site shall be less than 44,999 tonnes a 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>• Wastes that are in a form which is either sludge or liquid</li> </ul>	
<b>Waste Code</b>	<b>Description</b>
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15
<b>17</b>	<b>CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)</b>
<b>17 04</b>	<b>metals (including their alloys)</b>
17 04 01	copper, bronze, brass
17 04 02	aluminium



**Table S2.4 Permitted Waste types and quantities for non-hazardous Waste Electrical and Electronic Equipment authorised treatment facility**

**Maximum Quantities**

The total quantity of non-hazardous waste accepted at the site shall be less than 44,999 tonnes a year.

**Exclusions**

Wastes having any of the following characteristics shall not be accepted:

- Consisting solely or mainly of dusts, powders or loose fibres
- Wastes that are in a form which is either sludge or liquid

<b>Waste Code</b>	<b>Description</b>
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
<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 10</b>	<b>wastes from shredding of metal-containing wastes</b>
19 10 01	iron and steel waste
19 10 02	non-ferrous wastes
19 10 06	other fractions other than those mentioned in 19 10 05
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 02	ferrous metal
19 12 03	non-ferrous metal
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 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 40	metals

## Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 Emissions control system exhaust (WEEE shredder)	Extraction System	Total Suspended Particulates	20 mg/m <sup>3</sup> or other level agreed in writing with the Environment Agency	Hourly average	Quarterly or other frequency agreed in writing with the Environment Agency	In accordance with BS EN 13284-1 or as agreed in writing with the Environment Agency.
A2 Emissions control system exhaust (fridge plant)	Extraction System	Total Suspended particulates	10 mg/m <sup>3</sup> or other level agreed in writing with the Environment Agency	Hourly average	Quarterly or other frequency agreed in writing with the Environment Agency	In accordance with BS EN 13284-1 or as agreed in writing with the Environment Agency.
A2 Emission control system exhaust (fridge plant)	Stage 2 process treating refrigeration units	CFCs	Mass loss limit, set on a pro-rata basis, based upon a mass limit of 5g per 100 units processed per hour	Hourly average	Monthly for first 6 months following re-commissioning of stage 2 refrigeration unit destruction process, then quarterly with written agreement from the Environment Agency	BS EN 13649
A2 Emission control system exhaust (fridge plant)	Stage 2 process treating refrigeration units	Other volatile organic compounds  (including HCFCs, HFCs and HCs)	-	Hourly average	Monthly for first 6 months following re-commissioning of stage 2 refrigeration unit destruction process, then quarterly with written agreement from the Environment Agency	

<b>Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site—emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. Unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
Discharge point to storm sewer	Site surface water drainage from main/treatment building site area	None	No limit set	--	--	--
Discharge point to foul sewer	Site surface water drainage from separate storage area	None	No limit set	--	--	--

<b>Table S3.3 Ambient monitoring requirements</b>				
<b>Location or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
At a location or locations agreed in writing with the Environment Agency that will obtain reliable and representative data on particulate emissions from the waste management operations.	Total suspended particulates (TSP) unless otherwise agreed in writing with the Environment Agency.	Quarterly unless otherwise agreed in writing with the Environment Agency.	The equipment shall be operated to a procedure agreed in writing with the Environment Agency.  The emissions management plan must include action levels and regular review cycles with an overriding aim to reduce particulate emissions from the facility.	Monitoring equipment shall meet the MCERTS Performance Standards for Indicative Ambient Particulate Monitors or similar standard agreed in writing with the Environment Agency.  The equipment shall be calibrated in accordance with the manufacturer's recommendations or 6 monthly, whichever is first.  The system must be managed and maintained by suitably trained personnel.  The system must obtain representative data that must accurately reflect TSP levels produced by the site's activities.

<b>Table S3.4 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Pre-destruction processing Compressor oil	Concentration of refrigerant in the oil (%w/w)	Quarterly	Independent conformance testing	-
Destruction plant Contained environment	Lower Explosive Limit (LEL) or Limiting Oxygen Concentration (LOC)	Continuous	-	-
Residual materials conformance testing	Quantity of foam remaining on the granulated metal after processing (%w/w)	Quarterly	Independent conformance testing	-
	Quantity of foam remaining on the granulated plastic after processing (%w/w)	Quarterly	Independent conformance testing	-
	Quantity of residual blowing agents remaining in the foam after processing (%w/w)	Quarterly	Independent conformance testing	-
Record of residual wastes removed from the site	As set in Form Appendix A: Quantities of residual materials from pre-destruction and destruction process	Quarterly	-	-
Refrigeration unit degassing	Refrigeration unit type	Daily	Record of each unit type	Type 1 - 4
	Refrigerant type			CFC, HCFC, HFC, HC or ammonia
	Number of defective			-
Refrigeration unit carcass destruction	Refrigeration unit type	Daily	Record of each carcass destruction	Type 1 - 4
	Blowing agent type			CFC, HCFC, HFC or HC
Record of insulation panel foam destruction	Volume of panel processed	Monthly	Calculation	-
Quantity of refrigerant & blowing agent recovered	Quantity of refrigerant collected over reporting period	Monthly	Weighed using calibrated scales	-
	Quantity of blowing agent collected over reporting period			

## Schedule 4 – Reporting

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

<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Emissions to air Parameters as required by condition 3.5.1	A1 and A2 Emissions control system exhaust	Quarterly or other frequency agreed in writing with the Environment Agency	1 January, 1 April, 1 July, 1 October
Ambient air monitoring Parameters as required by condition 3.5.1	As agreed in writing by the Environment Agency.	Quarterly or other frequency agreed in writing with the Environment Agency	1 January, 1 April, 1 July, 1 October
Results of independent conformance testing of emissions to air (CFCs and other Volatile Organic Compounds) from fridge destruction process as required by table S3.1	A2 Emission control system exhaust.	Quarterly	From the first quarter following issue of this permit / variation

<b>Parameter</b>	<b>Units</b>	<b>Frequency</b>
WEEE processed	tonnes	Annual
Ferrous metal recovered	tonnes	Annual
Non-ferrous metal recovered	tonnes	Annual
Other fractions recovered	tonnes	Annual
Non-metallic shredder residue	tonnes	Annual
A summary of the residual waste materials from the fridge pre-destruction and destruction process removed from site, in the format of Appendix A	N/A	Quarterly

<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Fridge pre-destruction and destruction process - a summary of the wastes processed and the efficiency of the processing operations, in the format of Appendix B	Monthly	As specified in Appendix B
Fridge destruction process - a summary of the residual materials conformance testing, in the format of Appendix C	Quarterly	%w/w
Water usage	Annually	m <sup>3</sup>

<b>Table S4.3 Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Energy usage	Annually	MWh
Total raw material used	Annually	tonne

<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	09/08/16
Fridge pre-destruction and destruction process - quantities of residual materials	Quantities of residual materials from fridge pre-destruction and destruction process form (Appendix A) or other form as agreed in writing by the Environment Agency	09/08/16
Fridge destruction process - process efficiency	Fridge destruction process efficiency reporting form (Appendix B) or other form as agreed in writing by the Environment Agency	09/08/16
Fridge pre-destruction and destruction process - conformance testing of residual materials	Residual materials conformance testing reporting form (Appendix C) or other form as agreed in writing by the Environment Agency	09/08/16
Ambient air monitoring	Form Particulate 1 or other form as agreed in writing by the Environment Agency	09/08/16
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	09/08/16
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	09/08/16
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	09/08/16
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.

“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.

“baling” means baling that utilises a hydraulic machine that using compressive forces compacts various materials into regular-shaped dense bales (typically a cube). Bales may be belted with straps or steel wire to keep the bale in its compacted state; although for most metal bales this is not necessary. Baled scrap metal may be easier to handle, store and transport than loose scrap.

“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 (BATRR) and Treatment of Waste Electrical and Electronic Equipment (WEEE)’; and any revision to or replacement of it.

“Blowing agent” Blowing agent used in the foam formation process and contained in the insulating foam of a refrigeration unit, or other relevant electrical appliance, or insulation panel. Blowing agents are used in the foam formation process and include chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs) and hydrocarbons (HCs).

“compacting” means compacting involving the flattening or crushing of compactable metal wastes to aid storage and economic transportation to the scrap processor; it is often a preparation for shredding. Compacting may be achieved using a waste handler’s loading shovel (known as “tapping”) or specially-designed hydraulic flattener.

“Contained environment” Means an environment where there is atmospheric containment. This includes areas where air egress may only be facilitated through air extraction and blowing agent capture systems

“controlled substances” means chlorofluorocarbons, other fully halogenated chlorofluorocarbons, halons, carbon tetrachloride, 1,1,1-trichloroethane, methyl bromide, hydrobromofluorocarbons and hydrochlorofluorocarbons listed in Annex I of Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer, including their isomers, whether alone or in a mixture, and whether they are virgin, recovered, recycled or reclaimed.

“cutting” means cutting typically utilising either an oxy-acetylene gas cutting torch or abrasive disc cutter to cut and/or resize large pieces of scrap metal into more manageable sizes; powder torches and plasma torches may be used to cut heat-resistant scrap e.g. pig iron, copper, bronze).

“Defective unit” means a refrigeration unit that does not have any gas pressure in the cooling circuit.

“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.

“grading” means the sorting of metals to industry-agreed specifications ready for use, without the need for further treatment, by the end consumer to manufacture new metals.

“granulating” means granulated to a very small size with metal/non-metal separation by air classification and flotation.

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

“Hazardous property” has the meaning in Annex III of the Waste Framework Directive.

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

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

“Independent conformance testing” Independent sampling and testing of residual materials and emission points to confirm whether or not the standards set in the permit for fridge destruction are being fulfilled, carried out by an external laboratory and using accredited methods where they are available.

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

“Insulation panel” Rigid polyurethane foam insulation boards, typically removed from the internal and external walls, roofs and ceilings of buildings, cold stores or commercial or domestic cooling equipment, which contain CFC, HCFC, HFC or HC blowing agents.

“Insulation panel type” Based upon the type of facing material used to back or sandwich the insulation panel foam (e.g. aluminium foil, steel sheet, wood).

“List of Wastes” means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

“Lower Explosive Limit” means the lowest concentration (specified as a percentage) of a combustible gas in air capable of burning in the presence of an ignition source.

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

“ozone-depleting substances” “ODS” means “controlled substances” contained in refrigeration, air-conditioning and heat pump equipment, equipment containing solvents, fire protection systems and fire extinguishers.

“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.

“Refrigerant” means refrigerant gas contained in the compressor and cooling circuit of the refrigeration unit. Refrigerants include chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs), hydrocarbons (HCs) and ammonia.

“Refrigeration unit type” are four identified types of refrigeration unit, as set out in the table below:

Type 1	Refrigerator with storage capacity <0.18m <sup>3</sup>
Type 2	Refrigerator or combined refrigerator/freezer with storage capacity >0.18m <sup>3</sup> & <0.35m <sup>3</sup>
Type 3	Freezer with storage capacity <0.50m <sup>3</sup>
Type 4	any refrigerator or freezer not covered by Types 1-3

“Refrigeration unit” should be taken to include all types of refrigeration equipment as well as appliances like heat pump tumble dryers, de-humidifiers and portable air conditioners, and comparable commercial refrigeration units and appliances, are not explicitly included in the unit types defined above, however they should still be taken into account in the Appendix A and Appendix B reporting requirements and managed in accordance with the conditions of the permit where relevant.

“Refrigeration unit carcass” is the term used to describe refrigeration unit following completion of pre-destruction processing (i.e. following drainage of cooling system and removal of compressor and any switches/components, condensers and electronic drives).

“Residual materials” means both materials and wastes resulting from the specified operations.

“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.

“separation” means separating wastes into different material types, components and grades.

“shearing” means utilises a range of hydraulic machinery that comprise hard steel blades which cut metals into manageable sizes. It may be hand-held, static or attached to mobile plant (e.g. cranes).

“sorting” means sorting that may be undertaken by hand or machinery. Sorting enables materials to be processed and recycled appropriately. It may involve separation of different waste types or the separation of different metal types including different ferrous metals, non-ferrous metals and non-metallic materials (e.g. paper and plastic). The sorted metals are graded by visual inspection, supplemented by chemical and other laboratory tests. The physical sorting may be assisted by conveyors and electromagnets.

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

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

“WEEE” means waste electrical and electronic equipment.

“WEEE Directive” means Directive 2012/19/EU of the European Parliament and of the Council of 4th July 2012 on waste electrical and electronic equipment (WEEE).

“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.

Where the following terms appear in the waste code list in Tables S2.2, S2.3 or S2.4 they have the meaning given below.

“hazardous substance” means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008.

“heavy metal” means any compound of antimony, arsenic, cadmium, chromium (VI), copper, lead, mercury, nickel, selenium, tellurium, thallium and tin, as well as these materials in metallic form, as far as these are classified as hazardous substances

“polychlorinated biphenyls and polychlorinated terphenyls” (“PCBs”) means PCBs as defined in Article 2(a) of Council Directive 96/59/EC’.

Article 2(a) says that ‘PCBs’ means:

- polychlorinated biphenyls;
- polychlorinated terphenyls;
- monomethyl-tetrachlorodiphenyl methane, Monomethyl-dichloro-diphenyl methane, Monomethyldibromo-diphenyl methane; and
- any mixture containing any of the above mentioned substances in a total of more than 0,005 %by weight.

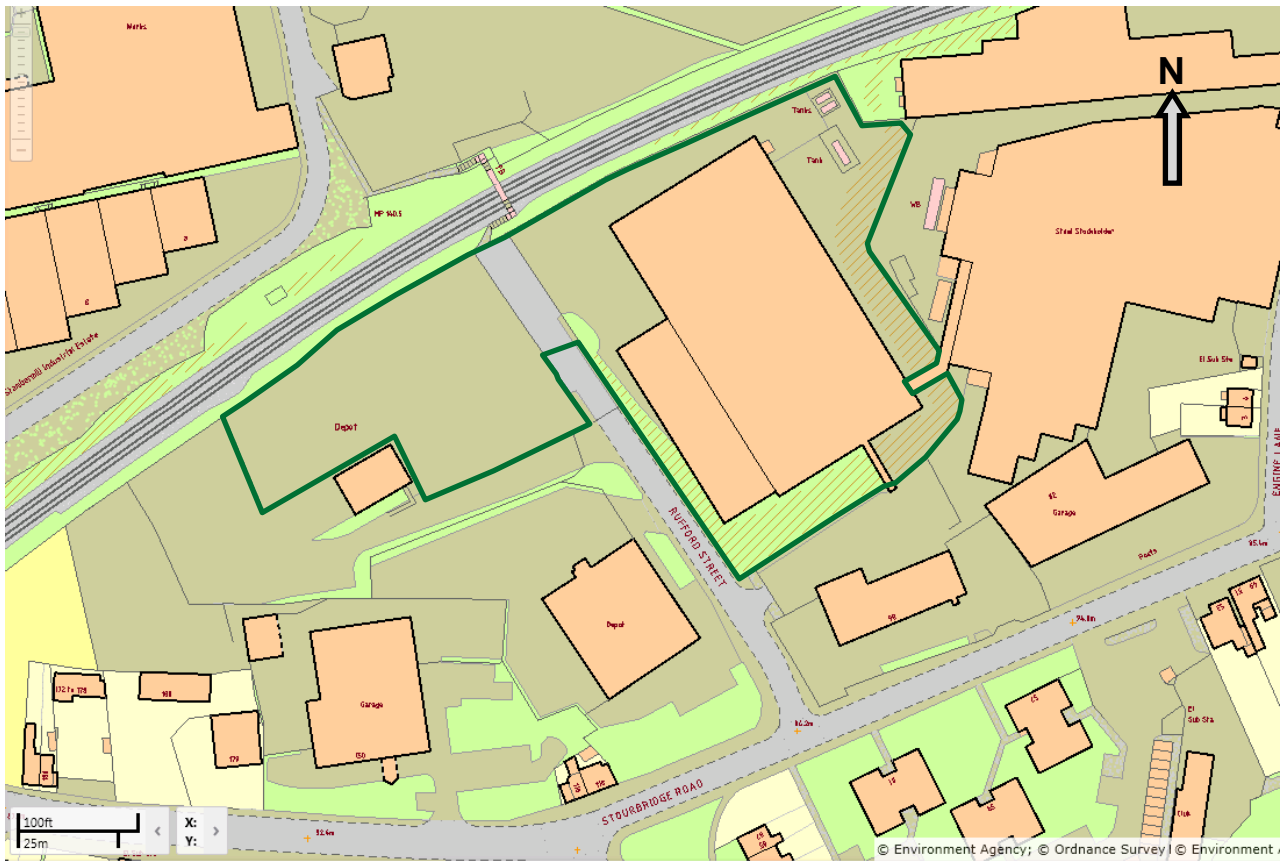
“transition metals” means any of the following metals: any compound of scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum, as well as these materials in metallic form, as far as these are classified as hazardous substances.

“stabilisation” means processes which change the hazardousness of the constituents in the waste and transform hazardous waste into non-hazardous waste.

“solidification” means processes which only change the physical state of the waste by using additives without changing the chemical properties of the waste.

“partly stabilised wastes” means wastes containing, after the stabilisation process, hazardous constituents which have not been changed completely into non-hazardous constituents and could be released into the environment in the short, middle or long term.

# Schedule 7 – Site plan



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END OF PERMIT

**Permit Number: BB3109LT**  
**West Midlands**  
**Facility: Recycling Centre**

**Operator: Environcom (North West) Ltd**  
**Form Number: Air1 / 09/08/16**

**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>
A1 Emissions control system exhaust (WEEE shredder)	Total Suspended Particulates	20 mg/m <sup>3</sup>	Hourly average				
A2 Emission control system exhaust (fridge plant)	Total Suspended particulates	10 mg/m <sup>3</sup>	Hourly average				
A2 Emission control system exhaust (fridge plant)	CFCs	Mass loss limit set on a pro rata basis upon a mass limit of 5g per 100 units process per hour	Hourly average				
A2 Emission control system exhaust (fridge plant)	Other volatile organic compounds (including HCFCs, HFCs and HCs)	--	Hourly average				

[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:** BB3109LT                      **Operator:** Environcom (North West) Ltd

**Facility:** West Midlands Recycling Centre                      **Form Number:** Ambient monitoring1 / 09/08/16

**Reporting of ambient monitoring for the period from DD/MM/YYYY to DD/MM/YYYY**

Emission Point	Parameter	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
At a location or locations agreed in writing with the Environment Agency that will obtain reliable and representative data on particulate emissions from the waste management operations.	Total suspended particulates (TSP) unless otherwise agreed in writing with the Environment Agency.					

[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:** BB3109LT  
**Facility:** West Midlands  
Recycling Centre

**Operator:** Environcom (North  
West) Ltd  
**Form Number:** WaterUsage1 / 09/08/16

**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:** BB3109LT                      **Operator:** Environcom (North West) Limited

**Facility:** West Midlands Recycling Centre                      **Form Number:** Energy1 / 09/08/16

**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		
TOTAL	-		

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

Operator's comments:

Signed .....

Date.....

(Authorised to sign as representative of Operator)

**Permit Number:** BB3109LT  
**Facility:** West Midlands  
Recycling Centre

**Operator:** Environcom (North  
West) Ltd  
**Form Number:** Performance1 / 09/08/16

**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.....

(Authorised to sign as representative of Operator)

## Appendix A

**Permit Number:** BB3109LT      **Operator:** Environcom (North West) Ltd  
**Facility:** West Midlands Recycling Centre      **Form Number:** Appendix A / 09/08/16

### Residual materials removed from DD/MM/YYYY to DD/MM/YYYY

Quantities of residual materials from pre-destruction and destruction processes		
Residual materials	Waste Categories	Quantities
Refrigerants and blowing agents	14 06 01* chlorofluorocarbons, HCFC, HFC	kg
Refrigerants and blowing agents	14 06 03* other solvents and solvent mixtures <sup>1</sup>	kg
Compressor oil	13 02 08* other engine, gear and lubricating oils	litres
Spent activated carbon	06 13 02* spent activated carbon (except 06 07 02)	kg
Mercury switches etc.	19 10 05* other fractions containing dangerous substances	kg
Ferrous metal	19 10 01 iron and steel waste	tonnes
Non-ferrous metal	19 10 02 non-ferrous waste	tonnes
Polyurethane foam	19 12 04 plastic and rubber	tonnes
Plastic and rubber	19 12 04 plastic and rubber	tonnes
Glass	19 02 05 glass	tonnes
Others	19 10 06 other fractions other than those mentioned in 19 10 05	kg

[1] 14 06 03\* should only be used if the waste does not contain CFC, HCFC or HFC refrigerant or blowing agent.

## Appendix B

**Permit Number:** BB3109LT                      **Operator:** Environcom (North West) Ltd  
**Facility:** West Midlands Recycling Centre                      **Form Number:** Appendix B / 09/08/16

**Destruction process efficiency reporting from DD/MM/YYYY to DD/MM/YYYY**

### Stage 1 Degassing

Record of refrigeration units received for Stage 1 degassing			
Type of unit	Number of units	Assumed refrigerant content	Refrigerant totals
Number of defective units <sup>1</sup>		--	--
Number of units containing halogenated refrigerants (CFCs, HCFCs and HFCs) (A)		x 100 g per unit =	
Number of units containing a hydrocarbon refrigerant (B)			
Number of units containing ammonia refrigerant (C)			
Number of other non-defective appliances <sup>2</sup>			
Total number of viable units (D) = (A) + (B) + (C)		Total refrigerant	g

[1] Identified from visual inspection (i.e. no compressor or damaged cooling circuit, manometer (no gas pressure), or foam formation in inspection glass.

[2] Includes heat-pump tumble dryers, de-humidifiers and air conditioners.

<b>Theoretical recovery of refrigerant per unit</b>	
Total refrigerant / (D)	g per unit

<b>Recovery of refrigerant</b>	<b>Amount / unit</b>
Weight of refrigerant storage container at start of reporting period (E)	g
Weight of refrigerant storage container at end of reporting period (F)	g
Weight of refrigerant recovered during reporting period (G) = (F) – (E)	g
Average weight of recovered refrigerant per unit = (G) / (D)	g per unit

## Stage 2 Destruction

<b>Record of unit carcasses processed for destruction</b>			
<b>Type of unit</b>	<b>Number of units</b>	<b>Assumed blowing agent content</b>	<b>Blowing agent totals</b>
<b>Carcasses containing halogenated blowing agents (CFCs, HCFCs, HFCs)</b>			
Type 1		x 240 g BA/unit =	g
Type 2		x 320 g BA/unit =	g
Type 3 & 4		x 400 g BA/unit =	g
<b>Carcasses containing hydrocarbon blowing agents (CFCs, HCFCs, HFCs)</b>			
Type 1		x 130 g BA/unit =	g
Type 2		x 227 g BA/unit =	g
Type 3 & 4		x 341 g BA/unit =	g
Total number of units processed for destruction (H)		Theoretical total blowing agent to be recovered	

<b>Theoretical blowing agent recovery per unit for given unit type mix</b>	
Theoretical total blowing agent / number of units (H)	g per unit

<b>Record of insulation panel foam processed for destruction</b>	<b>Amount</b>
Volume of panel processed	m <sup>3</sup>

<b>Actual recovery of blowing agent</b>	<b>Amount / unit</b>
Weight of blowing agent container at start of reporting period (I)	g
Weight of blowing agent container at end of reporting period (J)	g
Weight of recovered blowing agent during reporting period (K) = (J) – (I)	g
Average weight of recovered blowing agent per unit = (K) / (H)	g per unit

## Appendix C

**Permit Number:** BB3109LT      **Operator:** Environcom (North West) Ltd  
**Facility:** West Midlands Recycling Centre      **Form Number:** Appendix C / 09/08/16

### Residual materials conformance testing reporting from DD/MM/YYYY to DD/MM/YYYY

Residual materials		
Parameter	Limit	Sampling Result(s)
Quantity of foam remaining on the granulated metal after processing		
Quantity of foam remaining on the granulated plastic after processing		
Quantity of residual blowing agent remaining in the polyurethane foam	0.5% w/w where foam is stored in a contained environment subject to further recovery or destruction	
	OR	
	0.2% w/w in other cases	
Concentration of refrigerant in the compressor oil	<0.9% w/w	