Notice of variation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

eSynergy Developments Limited

Unit E
Asfordby Business Park
Asfordby
Leicestershire
LE14 3JL

Variation application number

EPR/CB3404TN/V002

Permit number

EPR/CB3404TN

Unit E
Permit number EPR/CB3404TN

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the variation of an environmental permit.

This variation is to delete the standard rules permit SR2008No23 conditions and add conditions for a bespoke waste operation and installation. The site will undertake the processing of WEEE for recovery and the processing of fridges containing ozone depleting substances (ODS), Fluorinated gas (F gas) and/or hydrocarbon blown foam insulation for recovery.

The facility will comprise of the following operations:

Installation

- Processing of fridges containing ozone depleting substances (ODS), Fluorinated gas (F gas) and hydrocarbons (schedule 5.3 Part A (1) a) (ii));
- Crushing of compact fluorescent tubes containing mercury, in specifically designed plant (schedule 5.3 Part A (1) a) (ii))

Waste operation

- Dismantling and storage of waste electrical and electronic equipment (WEEE) for recovery;
- Shredding of non hazardous WEEE equipment at less than 75 tonnes per day.
- Temporary storage of hazardous waste at less than 50 tonnes at any one time.

The installation and waste operations are located at SK 72293 20339. The nearest properties from the site are industrial units and offices to the north and north-west. The nearest built up areas are Melton Mowbray, approximately 1.8km to the west and Ashfordby, approximately 1.5km to the south west. There are 8 local wildlife sites within 2km of the installation.

The facility is designed to process up to 29,000 tonnes per annum of waste, which will mainly include fridges and general electronic equipment from domestic, industrial and commercial sources. All treatment will take place within a building, on an impermeable surface with sealed drainage and any liquids will be stored in tanks bunded to 110% of their capacity.

Waste is delivered to the site via road, which depending on its classification is either stored on the site's south yard or within the site's building prior to processing. WEEE will be manually dismantled to remove hazardous components prior to processing (e.g. compressors, blown foam containing ODS gases) and all these components will be separated out and stored within the building prior to offsite recovery.

Fridges will be degassed then subjected to the site's fridge processing plant which shreds fridge carcasses for recovery. All ODS emissions produced by the main shredding plant will be captured in a cryogenic condensing plant and all hydrocarbon emissions produced with the shredding units with be subject to appropriate abatement.

Compact fluorescent tubes will be processed via a specifically designed plant

Contaminated surface runoff from the south yard and within the building will be contained by the site's sealed drainage systems. Air emissions releases are via pollution abatement equipment which serves the pre-shredding plant and main fridge shredding plant.

The schedules specify the changes made to the original permit.

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

Status log of the permit		
Description	**Date**	**Comments**
Application received EPR/CB3404TN/A001	Duly made 16/12/2014.	Application for standard rules SR2008No23
Standard rules permit determined EPR/CB3404TN (EAWML 402043)	23/12/2014	Permit issued to eSynergy Developments Limited
Application received EPR/CB3404TN/V002	Duly made 21/08/2015	Application to vary a standard rules permit (EAWML 402043) to a bespoke waste operation and add an installation.
Additional information received	21/08/2015	Compact fluorescent tubes operating techniques, Site layout plan and confirmation of emissions points.
Response to Schedule 5 Notice dated 21/08/2015	15/09/2015	Operating techniques, fire prevention plan Emissions assessment.
Response to Schedule 5 Notice dated 05/10/2015	14/10/2015	Operating techniques, site drainage, fire prevention plan and emissions assessment.
Response to Schedule 5 Notice dated 26/10/2015	04/11/2015	Operating techniques, confirmation of fire suppressions system and confirmation of sealed drainage. Revised Fire Prevention Plan.
Additional information	05/11/2015	Confirmation of sealed drainage.
Permit determined EPR/CB3404TN (Billing References: EAWML402043, KP3237AC)	06/01/2016	Variation notice issued to eSynergy Developments Limited

End of introductory note

Notice of variation

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

Permit number

EPR/CB3404TN

Issued to

eSynergy Developments Limited ("the operator")

whose registered office is

1317 Melton Road
Syston
Leicester
LE7 2EN

company registration number 08665053

to operate a regulated facility at

Unit E
Asfordby Business Park
Asfordby
Leicestershire
LE14 3JL

to the extent set out in the schedules.

The notice shall take effect from 06/01/2016

Name	Date
Mike Jenkins	**06/01/2016**

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

The following conditions are deleted as a result of the application made by the operator:

Standard rules set SR2008No23

Schedule 2 – conditions to be amended

None

Schedule 3 – conditions to be added

The following conditions are added as a result of the application made by the operator:

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 A6, 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 A6, 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 For the following activities referenced in schedule 1, table S1.1 A1 to A6, 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 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, S2.4, S2.5 and S2.6: 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 following activities referenced in schedule 1, table S1.1 A1 to A6, 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).

2.3.9 Following a breach of condition 2.3.8 the operator shall interpret normal operation as being restored when all of the following are complied with:

a) when the failed equipment is repaired and brought back into normal operation; and

b) gas concentrations remain below any relevant lower explosive limit.

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 (BATRRT).

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 Liquids, batteries, capacitors containing PCBs/PCTs and any other hazardous waste removed from WEEE 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 activities shall not be brought into operation until the measures specified in schedule 1 table S1.7A 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.

3.1.3 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 Fire prevention

3.3.1 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.

3.3.2 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.

3.4 Odour

3.4.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

3.4.2 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.

3.5 Noise and vibration

3.5.1 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.

3.5.2 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.

3.6 Monitoring

3.6.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

(a) point source emissions specified in table S3.1;

(b) process monitoring specified in table S3.2.

3.6.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

3.6.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1 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 A6, 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 S4.2; 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.

4.3 Notifications

4.3.1 For the following activities referenced in schedule 1, table S1.1 A1 to A6, 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 A7, 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 4.3.1 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 For the following activities referenced in schedule 1, table S1.1 A1 to A6, 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 A7, 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	5.3 Part A (1) a) (ii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day by physico-chemical treatment.	R4 Recycling/reclamation of metals and metal compounds R5 Recycling/reclamation of other inorganic materials R3: Recycling/reclamation of organic substances which are not used as solvents	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 a weatherproof covering. Waste types suitable for acceptance are limited to those specified in Table S2.2.
A2	S5.3 A(1) (a) (ii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment.	**R5:** Recycling/reclamation of other inorganic compounds	Mechanical treatment of compact fluorescent tubes containing mercury for the purpose of recovery of constituent parts and materials. Treatment shall be carried out within a building provided with a weatherproof covering. Waste types suitable for acceptance are limited to those specified in Table S2.3.
	Directly Associated Activity		
A3	Raw materials storage	Storage of raw materials including, nitrogen, lubricants, oil and diesel.	From the receipt of raw materials to despatch for use within the facility
A4	Storage of hazardous waste.	R13: Storage of waste pending the operations numbered R4 and R5 (excluding temporary	Storage of hazardous waste prior to treatment via pre shredding and/or main shredding system

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**
		storage, pending collection, on site where it is produced).	From receipt of waste to treatment. Except for WEEE awaiting manual sorting, manual dismantling, repair or refurbishment only the maximum quantity of hazardous waste in aggregate that can be stored at the site shall not exceed 50 tonnes at any one time. All storage of waste containing hazardous components, other than refrigeration equipment will be provided with a weather proof covering Storage of florescent lamps shall be within rigid sealed containers. Storage of refrigeration units shall not exceed a maximum storage height of 3.5 metres. Waste types suitable for acceptance are limited to those specified in Table S2.2 and S2.3
A5	Storage of processed materials.	R13: Storage of waste pending the operations numbered R4 and R5 (excluding temporary storage, pending collection, on site where it is produced).	From storage of processed materials to despatch off site for recovery. Storage of separated ferrous, non-ferrous metals, polyurethane foam, oil refrigerants, blowing agents and other fractions following treatment.
A6	Baling of metal	Baling of metals to assist transport offsite	Baling of metals produced by the refrigerator shredding plant

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**
Activity reference	**Description of activities for waste operations**	**Limits of activities**	
A7	**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) **R4:** Recycling/reclamation of metals and metal compounds **R5:** Recycling/reclamation of other inorganic compounds **R3:** Recycling/reclamation of organic substances which are not used as solvents	WEEE Treatment operations shall be limited to: • Treatment consisting only of sorting, dismantling, separation, screening, grading, baling, shearing, compacting, crushing, granulation, repair or refurbishment, or cutting of waste into different components for recovery. • Treatment in shredders of non hazardous waste as specified in table 2.4, on site for recovery (no more than 75 tonnes per day) Except for WEEE awaiting manual sorting, manual dismantling, repair or refurbishment only the maximum quantity of hazardous waste in aggregate that can be stored at the site shall not exceed 50 tonnes at any one time. Treatment of WEEE shall be carried out within a building provided with a weatherproof covering. Buildings, covered areas or containers shall meet the following requirements: • buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water; • rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids; • containers containing waste shall be stored on an impermeable surface with sealed drainage system. All storage of waste containing hazardous components, other than refrigeration equipment will be provided with a weather proof covering For storage of refrigeration units: • Free storage of refrigeration units shall not exceed a maximum storage height of 3.5 metres. • Treatment of refrigeration units shall consist of manual degassing in line the Stage 1 standards in Tables S1.5.	

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**
		Waste types suitable for acceptance are limited to those specified in Table S2.4, S2.5 and S2.6.	

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application EPR/CB3404TN/V002	Part C3 Section 3a – Technical Standards and all referenced supporting documentation. Degassing Overview Ref: eSynergy03	21/08/2015
How to comply with your Environmental Permit	Document 433_11 Parts 1 and 2	n/a
Sector Guidance Note IPPC S5.06: Guidance for the recovery and Disposal of Hazardous and Non Hazardous Waste	Reference all relevant parts.	n/a
Additional information	Compact Fluorescent tubes operating techniques, revised site layout plan and confirmation of emissions points.	21/08/2015
Response to Schedule 5 Notice dated 21/08/2015	Responses to all questions.	15/09/2015
Response to Schedule 5 Noticed dated 05/10/2015	Responses to all questions.	14/10/2015
Response to Schedule 5 Noticed dated 26/10/2015	Responses to all questions. Confirmation of sealed drainage. Fire Risk Assessment and Fire Prevention Plan reference 0.1 (Version received 04/11/2015).	04/11/2015
Additional information	Confirmation that sluice gate, which is in place to cut off the discharge of surface water runoff to the interceptor, will remain in a closed position to seal the drainage from the south yard.	05/11/2015

Table S1.3 Substances, preparations and components to be removed from separately collected WEEE
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)
Mercury-containing components, such as switches or backlighting lamps
Batteries
Printed circuit boards of mobile phones, and of other devices if the surface of the printed circuit board is greater than 10 square centimetres
Toner cartridges, liquid and paste, as well as colour toner
Plastic containing brominated flame retardants
Asbestos waste and components which contain asbestos
Cathode ray tubes
Chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC), hydrofluorocarbons (HFC), or hydrocarbons (HC)
Gas discharge lamps
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
External electric cables
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
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
Electrolyte capacitors containing “substances of concern” (height > 25mm, diameter > 25mm or proportionately similar volume)

Table S1.4 Specified Treatment Methods for separately collected components of WEEE	
Component	**Specified Treatment**
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.

Table S1.5 Standards for refrigeration unit pre-destruction and destruction	
Stage 1) Pre-destruction processing of waste refrigeration units	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. 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. Upon removal of compressor oil from the cooling system: The compressor oil shall be processed to ensure that the concentration of refrigerant in the oil is <0.9% w/w; or 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. 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. Switches containing mercury or other hazardous components shall be removed from the unit and placed in a suitable container prior to unit destruction. All refrigerator units shall be drained of free water prior to destruction. Insulation panels shall be cut in a way that prevents or where that is not practicable, minimises dust and fugitive loss of blowing agent.
Stage 2) Refrigeration unit carcass and insulation panel destruction	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. 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. 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: • Metal - The quantity of foam remaining on the granulated metal after

Table S1.5 Standards for refrigeration unit pre-destruction and destruction	
	processing shall not exceed 0.5% w/w • Plastic - The quantity of foam remaining on the granulated plastic after processing shall not exceed 1% w/w • Foam - The quantity of residual blowing agents remaining in the polyurethane foam shall not exceed: – 0.5% w/w where foam is stored in a contained environment subject to further recovery or destruction – 0.2% w/w in other cases 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.

Table S1.6 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC1	The operator shall review the mercury monitoring for the Compact Fluorescent Lamps (CFL) processing plant. Specifically the review shall propose reference periods, monitoring frequency and monitoring standards or methods are. The operator shall provide a written report to the Environment Agency for written approval detailing the recommendations of the review along with proposals and timescales for ensuring the appropriate emissions monitoring methods are in place. The operator shall implement the proposals within the agreed timescales.	06/06/2016
IC2	The operator shall submit a written monitoring plan to the Environment Agency for approval. 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). On receipt of written agreement by the Environment Agency to the proposals and the timetable, the Operator shall carry out the monitoring exercise and submit to the Environment Agency a report on the results. The operator will give the Environment Agency at least fourteen days notice of the commencement of the monitoring exercise. The Environment Agency will be notified immediately if any fugitive releases are detected during the monitoring exercise.	06/03/2016
IC3	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 from the pre shredder and main fridge shredding plant identifying the fractions within the PM_{10}, and $PM_{2.5}$ 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. On receipt of written agreement by the Environment Agency to the proposal and the timetable, the Operator shall carry out the tests and	06/03/2016

Table S1.6 Improvement programme requirements		
Reference	**Requirement**	**Date**
	submit to the Environment Agency a report on the results.	
IC4	The operator shall submit proposals for undertaking a review of the refrigerant capture and fridge shredding process. The proposals shall • include a scheme to monitor and review the efficiency of plant processing commercial refrigeration units, in relation to the mass of ozone depleting gas and volatile organic compounds captured from the refrigeration degassing and shredding processes and the amount of materials recovered; and • Outline timescales for the review. Once the proposals have been approved in writing by the Environment Agency, the operator shall undertake the review in line with the proposed timescales.	06/06/2016
IC5	The operator shall provide a written report to the Environment Agency for written approval detailing the findings and recommendations of the review required under IC4. The report shall • Assess the mass of ozone depleting gas and volatile organic compounds vented to atmosphere after treated via the pre shredder and main shredder gas emissions abatement systems; • Assess the amount of material recovered; • Outline recommendations for improving the efficiency of the process and ongoing monitoring; and • Propose timescales for implementation of any recommendations The operator shall implement the recommendations in the report within the timescales approved by the Environment Agency	06/01/2016

Table S1.7A Pre-operational measures	
Reference	**Pre-operational measures**
1	Prior to undertaking any shredding of refrigeration units the operator shall provide a report the Environment Agency for written approval which outlines proposals for the installation of an automated sprinkler system at the site which covers all waste storage areas that pose a fire risk within the building. The report shall justify the locations of the automated sprinkler system and outline timescales for installation. Once approved the operator's proposals for an automated sprinkler system shall be implemented at the site within a timescale agreed with the Environment Agency.
2	Prior to undertaking any storage of waste outside the building, the operator shall demonstrate to the Environment Agency that an appropriate sealed drainage system is in place. The operator shall not undertake any external storage until they have written approval from the Environment Agency.
3	Prior to processing any refrigeration equipment via the pre-shredding plant, the operator shall provide a report to the Environment Agency for written approval which

Table S1.7A Pre-operational measures	
Reference	**Pre-operational measures**
	reviews and proposes methods for abating all hydrocarbon point source emissions vented from the pre-shredding process. The report shall outline: • the preferred emission abatement option; • justify its application; • propose a timescale for its implementation; and • outline proposals for ongoing monitoring of the system The operator shall not commence the processing of refrigeration equipment via the pre shredding plant until they have demonstrated an appropriate abatement system is in place at the site and they have received written approval from the Environment Agency.

Schedule 2 – Waste types, raw materials and fuels

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

Table S2.2 Permitted waste types and quantities for Fridge Pre-treatment, Degassing and Shredding	
Maximum quantity Annual throughput for all permitted activities on this site, inclusive of all waste types outlined in tables S2.2, S2.3, S2,4, S2.5 and S2.6 shall not exceed 29,000 tonnes	
Exclusions Wastes having any of the following characteristics shall not be accepted: Consisting solely or mainly of dusts, powders or loose fibres	
Waste code	**Description**
16	**Wastes not otherwise specified in the list**
16 02	**wastes from electrical and electronic equipment**
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
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
17	**Construction and demolition wastes (including excavated soil from contaminated sites)**
17 06	**insulation materials and asbestos-containing construction materials**
17 06 03*	other insulation materials consisting of or containing hazardous substances
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
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
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35

Table S2.3 Permitted waste types and quantities for Crushing of Compact Fluorescent tubes	
Maximum quantity Annual throughput for all permitted activities on this site, inclusive of all waste types outlined in tables S2.2, S2.3, S2,4, S2.5 and S2.6 shall not exceed 29,000 tonnes	
Exclusions Wastes having any of the following characteristics shall not be accepted: Consisting solely or mainly of dusts, powders or loose fibres	
Waste code	**Description**
16	**Wastes not otherwise specified in the list**
16 02	**wastes from electrical and electronic equipment**
16 02 15*	hazardous components removed from discarded equipment
20 01 21*	fluorescent tubes and other mercury containing waste

Table S2.4 Permitted waste types and quantities for Pre-treatment and shredding of Non Hazardous WEEE	
Maximum quantity Annual throughput for all permitted activities on this site, inclusive of all waste types outlined in tables S2.2, S2.3, S2,4, S2.5 and S2.6 shall not exceed 29,000 tonnes	
Exclusions Wastes having any of the following characteristics shall not be accepted: Consisting solely or mainly of dusts, powders or loose fibres	
Waste code	**Description**
15	**Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 04	metallic packaging
16	**Wastes not otherwise specified in the list**
16 02	**wastes from electrical and electronic equipment**
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
19	**Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use**
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 02	ferrous metal
19 12 03	non-ferrous metal

Table S2.4 Permitted waste types and quantities for Pre-treatment and shredding of Non Hazardous WEEE	
Maximum quantity Annual throughput for all permitted activities on this site, inclusive of all waste types outlined in tables S2.2, S2.3, S2,4, S2.5 and S2.6 shall not exceed 29,000 tonnes	
Exclusions Wastes having any of the following characteristics shall not be accepted: Consisting solely or mainly of dusts, powders or loose fibres	
Waste code	**Description**
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
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

Table S2.5 Permitted waste types and quantities for Manual dismantling of hazardous WEEE	
Maximum quantity Annual throughput for all permitted activities on this site, inclusive of all waste types outlined in tables S2.2, S2.3, S2,4, S2.5 and S2.6 shall not exceed 29,000 tonnes	
Exclusions Wastes having any of the following characteristics shall not be accepted: Consisting solely or mainly of dusts, powders or loose fibres	
Waste code	**Description**
16	**Wastes not otherwise specified in the list**
16 02	**wastes from electrical and electronic equipment**
16 02 10*	discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09
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
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
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

Table S2.6 Permitted waste types and quantities for waste storage and transfer	
Maximum quantity	**Annual throughput** Annual throughput for all permitted activities on this site, inclusive of all waste types outlined in tables S2.2, S2.3, S2,4, S2.5 and S2.6 shall not exceed 29,000 tonnes

Exclusions	Wastes having any of the following characteristics shall not be accepted: - Consisting solely or mainly of dusts, powders, or loose fibres
Waste code	**Description**
03	**Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard**
03 01	**wastes from wood processing and the production of panels and furniture**
03 01 04*	sawdust, shavings, cuttings, wood, particle board and veneer containing hazardous substances
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
13	**Oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19)**
13 02	**waste engine, gear and lubricating oils**
13 02 08*	other engine, gear and lubricating oils
14	**Waste organic solvents, refrigerants and propellants (except 07 and 08)**
14 06	**waste organic solvents, refrigerants and foam/aerosol propellants**
14 06 01*	chlorofluorocarbons, HCFC, HFC
15	**Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 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 10*	packaging containing residues of or contaminated by hazardous substances
15 01 11*	metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers
15 02	**absorbents, filter materials, wiping cloths and protective clothing**
15 02 02*	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances
16	**Wastes not otherwise specified in the list**
16 02	**wastes from electrical and electronic equipment**
16 02 09*	transformers and capacitors containing PCBs
16 02 10*	discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09
16 02 11*	discarded equipment containing chlorofluorocarbons, HCFC, HFC
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 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 02 15*	hazardous components removed from discarded equipment

Table S2.6 Permitted waste types and quantities for waste storage and transfer	
Maximum quantity	**Annual throughput** Annual throughput for all permitted activities on this site, inclusive of all waste types outlined in tables S2.2, S2.3, S2,4, S2.5 and S2.6 shall not exceed 29,000 tonnes
Exclusions	Wastes having any of the following characteristics shall not be accepted: - Consisting solely or mainly of dusts, powders, or loose fibres
Waste code	**Description**
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15
16 03	**off-specification batches and unused products**
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 06	organic wastes other than those mentioned in 16 03 05
16 06	**batteries and accumulators**
16 06 01*	lead batteries
16 06 02*	Ni-Cd batteries
16 06 03*	mercury-containing batteries
16 06 04	alkaline batteries (except 16 06 03)
16 06 05	other batteries and accumulators
16 10	**aqueous liquid wastes destined for off-site treatment**
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01
16 10 04	aqueous concentrates other than those mentioned in 16 10 03
17	**Construction and demolition wastes (including excavated soil from contaminated sites)**
17 06	**insulation materials and asbestos-containing construction materials**
17 06 03*	other insulation materials consisting of or containing hazardous substances
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
19	**Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use**
19 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 05	glass
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 08	biodegradable kitchen and canteen waste
20 01 21*	fluorescent tubes and other mercury-containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons

Table S2.6 Permitted waste types and quantities for waste storage and transfer	
Maximum quantity	**Annual throughput** Annual throughput for all permitted activities on this site, inclusive of all waste types outlined in tables S2.2, S2.3, S2,4, S2.5 and S2.6 shall not exceed 29,000 tonnes
Exclusions	Wastes having any of the following characteristics shall not be accepted: - Consisting solely or mainly of dusts, powders, or loose fibres
Waste code	**Description**
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
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 39	plastics
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 (fridge plant)	Stage 2 process treating refrigeration units (Main shredding plant)	Total Suspended particulates	10 mg/m^3 or other level agreed in writing with the Environment Agency	Hourly average	Quarterly or other frequency agreed in writing with the Environment Agency	BS EN 13284-1
A1 Emissions control system exhaust (fridge plant)	Stage 2 process treating refrigeration units (Main shredding plant)	CFCs and HCFCs	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 then quarterly with written agreement from the Environment Agency	BS EN 13649
A1 Emissions control system exhaust (fridge plant)	Stage 2 process treating refrigeration units (Main shredding	Other volatile organic compounds Including cyclopentane and pentane	-	Hourly average	Monthly for first 6 months then quarterly with written agreement from the Environment	BS EN 13649

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**
	plant)	isomers			Agency	
A2 Emissions control system exhaust (fridge plant)	Stage 2 process treating refrigeration units (Pre-shredding Plant)	Total Suspended particulates	10 mg/m^3 or other level agreed in writing with the Environment Agency	Hourly average	Quarterly or other frequency agreed in writing with the Environment Agency	BS EN 13284-1
A2 Emissions control system exhaust (fridge plant)	Stage 2 process treating refrigeration units (Pre-shredding Plant)	Other volatile organic compounds Including cyclopentane and pentane isomers	-	Hourly average	Monthly for first 6 months then quarterly with written agreement from the Environment Agency	BS EN 13649
A3 CFL crusher	Vent	Mercury	0.02mg/m^3	As agreed with Environment Agency on completion of improvement condition IC1	As agreed with Environment Agency on completion of improvement condition IC1	As agreed with Environment Agency on completion of improvement condition IC1

Table S3.2 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
Pre-destruction processing Compressor oil	Concentration of refrigerant in the oil (%w/w)	Quarterly	Independent conformance testing	-
Destruction plant Contained environments	Lower Explosive Limit (LEL) or Limiting Oxygen Concentration (LOC)	Continuous	-	Includes both pre shredding and main shredding plant
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	Quarterly	Independent conformance	-

Table S3.2 Process monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
	granulated plastic after processing (%w/w)		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 units			-
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.

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Results of independent conformance testing of emissions to air (CFCs and other Volatile Organic Compounds) as required by table S3.1	A1, A2 Emission control system exhaust.	Quarterly	From the first quarter following issue of this permit / variation

Table S4.2 Annual production/treatment	
Parameter	**Units**
Domestic Refrigeration units processed	tonnes
Commercial Refrigeration units processed	tonnes
Fluorescent lamps processed	tonnes
WEEE processed	tonnes
Ferrous metal recovered	tonnes
Non-ferrous metal recovered	tonnes
Other fractions recovered	tonnes
Non-metallic shredder residue	tonnes
A summary of the residual waste materials removed from site, in the format of Appendix A	tonnes

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	m^3
Energy usage	Annually	MWh
Total raw material used	Annually	tonne
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
A summary of the residual materials conformance testing, in the format of Appendix C	Quarterly	%w/w

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Air	Form air 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY
Quantities of residual materials	Quantities of residual materials from pre-destruction and destruction process form (Appendix A) or other form as agreed in writing by the Environment Agency	DD/MM/YY
Process efficiency	Destruction process efficiency reporting form (Appendix B) or other form as agreed in writing by the Environment Agency	DD/MM/YY
Conformance testing of residual materials	Residual materials conformance testing reporting form (Appendix C) or other form as agreed in writing by the Environment Agency	DD/MM/YY
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY

Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

Part A

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

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

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

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

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

Part B – to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

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

“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 (BATRRT) 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 lll 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.

“Reference 1” means the International Atomic Energy Agency recommendations in Annex IV of ‘Recommendations on Monitoring and Response Procedures for Radioactive Scrap Metal’, UNECE, 2006.

“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.

“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 <0.18m3
Type 2	Refrigerator or combined refrigerator/freezer with storage capacity >0.18m3 & <0.35m3
Type 3	Freezer with storage capacity <0.50m3
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.

"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 Table S2.2, S2.3, S2.4, S2.5 and S2.6 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.

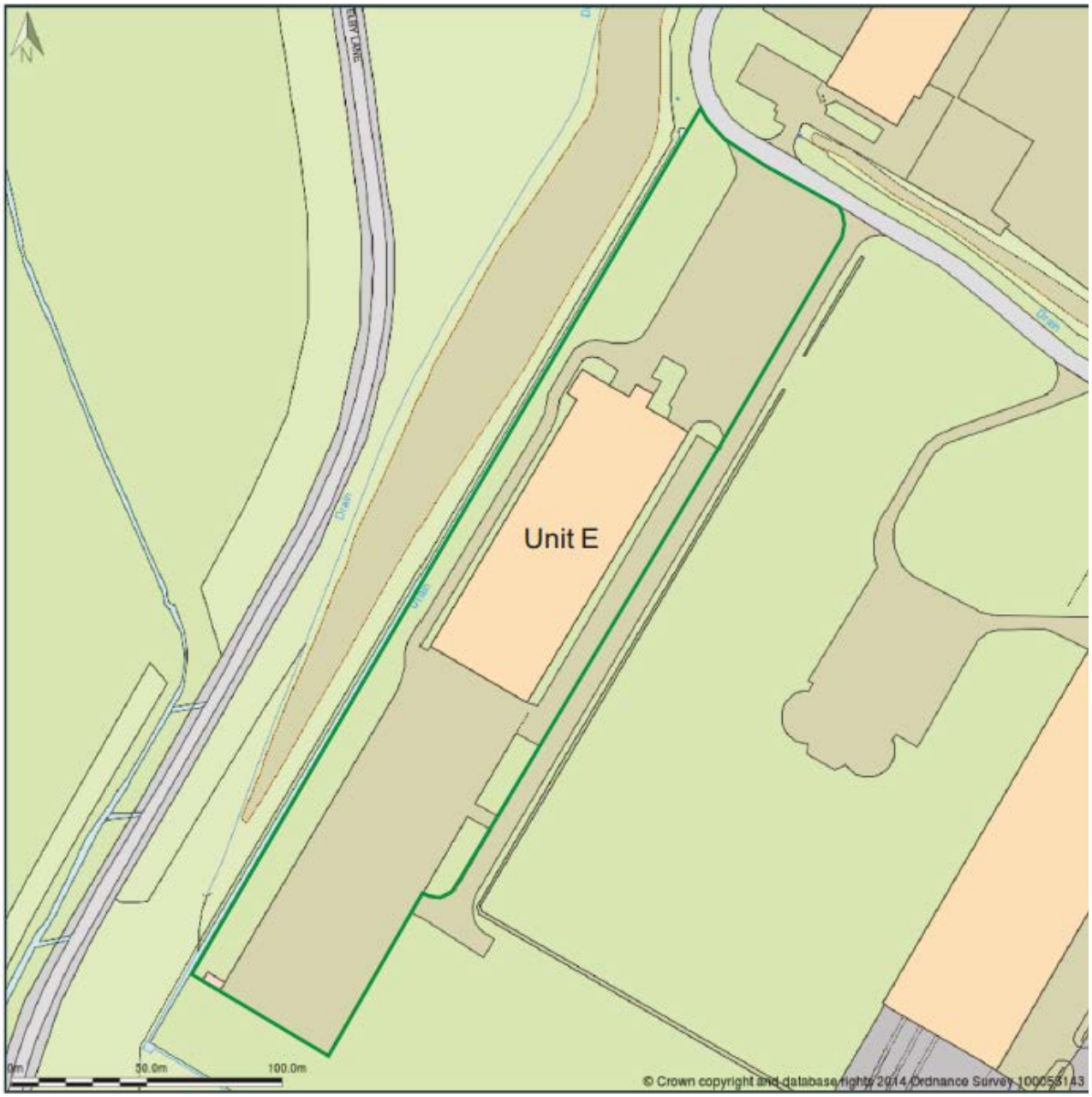
“transition metals” means any of the following metals: any compound of scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum, as well as these materials in metallic form, as far as these are classified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

Appendix A

Permit Number: EPR/CB3404TN Operator: eSynergy Developments Limited

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* CFCs, HCFCs, HFCs	Kg
Refrigerants and blowing agents	14 06 03* other organic solvents and solvent mixtures[2]	Kg
Compressor oil	13 02 08* other engine, gear and lubricating oils	Litres
Spent activated carbon	06 13 02* spent activated carbon	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 rubber and plastic	Tonnes
Plastic and rubber	19 12 04 rubber and plastic	Tonnes
Glass	19 12 05 glass	Tonnes
Others	19 10 06 other fractions other than those mentioned in 19 10 05	Kg

[2] 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: EPR/CB3404TN Operator: eSynergy Developments Limited

Facility: Unit E, Ashfordby Form Number: 06/01/2016

Destruction process efficiency reporting 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[1]		-	-
Number of units containing halogenated refrigerants (CFC, HCFC and HFC) (A)		x 100g per unit =	
Number of units containing a hydrocarbon refrigerant (B)		x 40g per unit =	
Number of units containing ammonia refrigerant (C)		x 500g per unit =	
Number of other non defective appliances[2]		-	-
Total number of viable units (D) = (A) + (B) + (C)		**Total refrigerant**	g

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

Recovery of refrigerant	**Amount/unit**
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

Record of unit carcasses processed for destruction			
Type of unit	**Number of units**	**Assumed blowing agent content**	**Blowing agent totals**
Carcasses containing halogenated blowing agents (CFCs, HCFCs, HFCs)			

[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

Type 1		x 240g BA/unit =	g
Type 2		x 320g BA/unit =	g
Type 3 & 4		x 400g BA/unit =	g
Carcasses containing hydrocarbon blowing agents			
Type 1		x 130g BA/unit =	g
Type 2		x 227g BA/unit =	g
Type 3 & 4		x 341g BA/unit =	g
Total number units processed for destruction (H)		Theoretical total blowing agent to be recovered	g

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

Record of insulation panel foam processed for destruction	**Amount**
Volume of panel processed	m^3

Actual recovery of blowing agent	**Amount/unit**
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 (K) = (J) – (I)	g
Average weight of recovered blowing agent per unit = (K) / (H)	g per unit

Appendix C

Permit Number: EPR/CB3404TN Operator: eSynergy Developments Limited

Facility: Unit E, Ashfordby Form Number: 06/01/2016

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

Residual materials		
Parameter	**Limit**	**Sampling Result(s)**
Quantity of foam remaining on the granulated metal after processing	0.5% w/w	
Quantity of foam remaining on the granulated plastic after processing	1% w/w	
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	