

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

---

Amey LG Limited  
Isle Of Wight Waste Recovery Park  
Forest Road  
Newport  
Isle of Wight  
PO30 5YS

**Variation application number**

EPR/QP3337AD/V002

**Consolidated permit number**

EPR/QP3337AD

# Isle Of Wight Waste Recovery Park

## Permit number EPR/QP3337AD

### Introductory note

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

The following notice gives notice of the variation of environmental permits EPR/QP3337AD, EA WML 19767 AND P.9420/IOW/00 referred to in the status logs below and the replacement of those permits with a consolidated environmental permit.

The site has three permits covering treatment of waste to produce refuse derived fuel (RDF) and waste transfer, discharge of surface water and gasification of waste. This variation is to consolidate the three permits into a single permit and to allow operation of a new waste treatment plant and a refurbishment of the gasification plant. The changes are as follows:

A new waste treatment building that will receive municipal and commercial waste and remove recyclable materials to produce RDF. There will also be provision to receive mixed recyclables and sort these into categories before transferring off site. The gasification plant will continue to gasify RDF. It will be refurbished by replacing the boiler and steam turbine. The stack will also be replaced by an identical unit. The changes in the gasification plant will allow an increase in capacity from 4 tonnes per hour to 5 tonne per hour.

An updated description of the facility is as follows:

This Permit is for a gasification plant with associated electrical energy generation from a steam turbine. The permit also includes waste pre-treatment activities as well as waste storage and transfer facilities. The plant is located near Newport in the Isle of Wight on the edge of Parkhurst Forest and will gasify refuse derived fuel (RDF) as the main fuel. The gasification plant is classified as an incineration plan. The facility will have a total capacity of 80,000 tonnes per year. The pre-treatment plant will have a capacity of 47,400 tonnes per year with the gasification plant having a capacity of 44,000 tonnes per year and the MRF plant a capacity of 32,600 tonnes per year.

Municipal waste will be received into a waste processing building. The waste will undergo treatments to remove recyclable materials. The waste will then be shredded and blended to produce RDF before being transferred by conveyor to the gasification building. The recovered recyclable materials will be stored before being transferred off site.

The RDF will then be gasified in a gasification chamber. This involves heating the RDF in a reduced oxygen environment. A gas called a syngas will be produced. The syngas is then burned in an oxidation chamber. The combustion gases will be passed through a boiler to produce steam which in turn produces electricity in a steam turbine. The plant is expected to produce 20,600MWh of electricity per year. The combustion gases will be treated with lime, activated carbon and pass through a bag filter system before being emitted to atmosphere via a 26 m high stack.

The treatment building can also operate as a waste sorting facility (MRF). Mixed recyclables will be received and sorted into recyclable categories before being sent off site for recovery.

The current discharge consent for surface water run-off from the waste treatment area is now incorporated into this permit. Surface water run-off will be discharged to an unnamed brook via an interceptor.

There are no discharges of process water to sewer.

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 permit A: EPR/QP3337AD</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application EPR/JP3132LH/A001 determined	07/11/2006	
Application Variation EPR/JP3132LH/V002	Duly Made 12/05/2010	
Application Variation EPR/JP3132LH/V002 determined	17/08/2010	
Environment Agency Initiated Variation EPR/JP3132LH/V003	Issued 17/05/2011	
Agency Variation EPR/JP3132LH/V004	Determined 18/02/2014	Agency variation to implement the changes introduced by the IED.
Application EPR/QP3337AD/T001 (full transfer of permit EPR/JP3132LH)	Duly made 31/07/2015	Application to transfer the permit in full to Amey LG Limited.
Transfer determined EPR/QP3337AD	15/09/2015	Full transfer of permit complete.
Variation application EPR/QP3337AD/V002	Duly made 12/02/2016	Variation and consolidation
Variation determined EPR/QP3337AD/V002 [Billing ref: XP3334RN]	07/06/16	

<b>Status log of permit B: EA WML 19767</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Waste disposal resolution issued	18/08/1992	Resolution issued to P Richardson, County Surveyor, Isle of Wight County Council
Waste management licence issued (EAWML 19767)	29/04/1994	Environment Agency licence issued to Isle of Wight Council.
Variation determined	17/08/1994	Varied permit issued.
Variation determined (EAWML 19767)	07/06/1996	Varied permit issued.
Variation determined (EAWML 19767)	16/10/1996	Varied permit issued.
Variation determined	10/03/1997	Varied permit issued.
Transfer determined and modified (EAWML 19767)	17/07/2001	Permit transferred to Island Waste Services Limited.

<b>Status log of permit B: EA WML 19767</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Environment Agency initiated variation determined	04/12/2003	Financial provision condition removed from permit.
Variation determined (EAWML 19767)	09/09/2005	Varied permit issued.
Application EPR/DB3301MP/T001 (full transfer of permit EAWML 19767)	Duly made 16/09/2015	Application to transfer the permit in full to Amey LG Limited.
Transfer determined EPR/DB3301MP	31/10/2015	Full transfer of permit complete.
Variation application EPR/QP3337AD/V002	Duly made 12/02/2016	Variation and consolidation

<b>Status log of permit C: P.9420/IOW/00</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Discharge consent P.9420/IOW/00	26/06/2002	Issued to Island Waste Services Limited
Transfer notification PO9420/T001	Duly made 20/08/2015	Application to transfer the permit in full to Amey LG Limited
Transfer determined PO9420	Issued 01/10/2015	Full transfer of permit
Variation application EPR/QP3337AD/V002	Duly made 12/02/2016	Variation and consolidation

End of introductory note

# Notice of variation and consolidation

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

The Environment Agency in exercise of its powers under regulations 18 and 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates environmental permits

### Permit numbers

EPR/QP3337AD

EPR/DB3301MP

P09420

### Issued to

**Amey LG Limited** (“the operator”)

whose registered office is

**The Sherard Building**

**Edmund Halley Road**

**Oxford**

**OX4 4DQ**

company registration number 03612746

to operate a regulated facility at

**Isle Of Wight Waste Recovery Park**

**Forest Road**

**Newport**

**Isle of Wight**

**PO30 5YS**

to the extent set out in the schedules.

The notice shall take effect from 07/06/2016

**The number of the consolidated permit is EPR/QP3337AD**

Name	Date
Philip Lamb	07/06/2016

Authorised on behalf of the Environment Agency

## **Schedule 1 – changes in the permit**

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/QP3337AD**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/QP3337AD/V002 authorising,

**Amey LG Limited** (“the operator”),

whose registered office is

**The Sherard Building  
Edmund Halley Road  
Oxford  
OX4 4DQ**

company registration number 03612746

to operate a regulatory facility at

**Isle Of Wight Waste Recovery Park  
Forest Road  
Newport  
Isle of Wight  
PO30 5YS**

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

Name	Date
Philip Lamb	07/06/2016

Authorised on behalf of the Environment Agency

# Conditions

## 1 Management

### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme.

### 1.2 Energy efficiency

- 1.2.1 For activities A1 to A3, referenced in schedule 1 table S1.1, the operator shall:
- (a) take appropriate measures to ensure that energy is recovered with a high level of energy efficiency and 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.
- 1.2.2 The operator shall provide and maintain steam and/or hot water pass-outs such that opportunities for the further use of waste heat may be capitalised upon should they become practicable.
- 1.2.3 The operator shall review the viability of Combined Heat and Power (CHP) implementation at least every 4 years, or in response to any of the following factors, whichever comes sooner:
- (a) new plans for significant developments, if they are located on the Isle of Wight and within 15 km of the installation;
  - (b) changes to the Local Plan;
  - (c) changes to the DECC UK CHP Development Map or similar; and
  - (d) new financial or fiscal incentives for CHP.

The results shall be reported to the Agency within 2 months of each review, including where there has been no change to the original assessment in respect of the above factors

### 1.3 Efficient use of raw materials

- 1.3.1 For activities A1 to A3, referenced in schedule 1 table S1.1, the operator shall:
- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
  - (b) maintain records of raw materials and water used in the activities;



- (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
- (d) take any further appropriate measures identified by a review.

## **1.4 Avoidance, recovery and disposal of wastes produced by the activities**

1.4.1 The operator shall take appropriate measures to ensure that:

- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
- (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

## **2 Operations**

### **2.1 Permitted activities**

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).

2.1.2 Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

### **2.2 The site**

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

### **2.3 Operating techniques**

2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.

2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.

2.3.4 Waste shall only be accepted if:

- (a) it is of a type and quantity listed in schedule 2 tables S2.2, S2.3, S2.4 and S2.5; and
- (b) it conforms to the description in the documentation supplied by the producer or holder; and

- (c) for activities A1 and A4, referenced in schedule 1 table S1.1, it having been separately collected for recycling, it is subsequently unsuitable for recovery by recycling.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.
- 2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.
- 2.3.7 Waste shall not be charged, or shall cease to be charged, if:
- (a) the combustion chamber temperature is below, or falls below, 850°C ; or
  - (b) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded; or
  - (c) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than under abnormal operating conditions; or
  - (d) monitoring results required to demonstrate compliance with any continuous emission limit value in schedule 3 table S3.1 are unavailable other than under abnormal operating conditions.
- 2.3.8 The operator shall have at least one auxiliary burner in each line at start up or shut down or whenever the operating temperature falls below that specified in condition 2.3.7, as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.3.7 is maintained in the combustion chamber, such burner(s) may be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.
- 2.3.9 The operator shall record the beginning and end of each period of “abnormal operation”.
- 2.3.10 During a period of “abnormal operation”, the operator shall restore normal operation of the failed equipment or replace the failed equipment as rapidly as possible.
- 2.3.11 Where, during “ abnormal operation”, on an incineration line, any of the following situations arise, waste shall cease to be charged on that line until normal operation can be restored:
- (a) continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1 due to disturbances or failures of the abatement systems, or continuous emission monitor(s) are out of service, as the case may be, for a total of 4 hours uninterrupted duration;
  - (b) the cumulative duration of “ abnormal operation” periods over 1 calendar year has reached 60 hours;
  - (c) continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1 (a) due to disturbances or failures of the abatement systems;
  - (d) continuous emission monitors or alternative techniques to demonstrate compliance with the emission limit value(s) for particulates, TOC and / or CO in schedule 3 table S3.1 (a), as agreed in writing with the Environment Agency, are unavailable.
- 2.3.12 The operator shall interpret the end of the period of “abnormal operation” as the earliest of the following:
- (a) when the failed equipment is repaired and brought back into normal operation;
  - (b) when the operator initiates a shut down of the waste combustion activity, as described in the application or as agreed in writing with the Environment Agency;

- (c) when a period of four hours has elapsed from the start of the “abnormal operation”;
- (d) when, in any calendar year, an aggregated period of 60 hours “abnormal operation” has been reached.

2.3.13 Bottom ash and APC residues shall not be mixed.

## **2.3 Improvement programme**

2.3.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

2.3.2 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.

## **2.4 Pre-operational conditions**

2.4.1 The activities shall not be brought into operation until the measures specified in schedule 1 table S1.4 have been completed.

# **3 Emissions and monitoring**

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

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2 except in “abnormal operation”, when there shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1(a), S3.2 and S3.3.

3.1.2 The limits given in schedule 3 shall not be exceeded.

3.1.3 Wastes produced at the site shall, as a minimum, be sampled and analysed in accordance with schedule 3 table S3.4. Additional samples shall be taken and tested and appropriate action taken, whenever:

- (a) disposal or recovery routes change; or
- (b) it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

## **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.
- 3.2.4 The Operator shall carry out monitoring of soil and groundwater in accordance with IED articles 14(1)(b), 14(1)(e) and 16(2) to the protocol agreed in writing with the Environment Agency under IC4.

### **3.3 Odour**

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

### **3.4 Noise and vibration**

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

### **3.5 Monitoring**

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1, S3.1(a) and S3.2;
  - (b) process monitoring specified in table S3.3;
  - (c) residue quality 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) unless otherwise agreed in writing by the Environment Agency. Newly installed CEMs, or CEMs replacing existing CEMs, shall have MCERTS certification and have an MCERTS certified range which is not greater than 1.5 times the daily emission limit value (ELV) specified in schedule 3 table S3.1. The CEM shall also be able to measure instantaneous values over the ranges which are to be expected during all operating conditions. If it is necessary to use more than one range setting of the CEM to achieve this requirement, the CEM shall be verified for monitoring supplementary, higher ranges.
- 3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.1(a), and S3.2 unless otherwise agreed in writing by the Environment Agency.

3.5.5 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3 table S3.1; the Continuous Emission Monitors shall be used such that;

- (a) the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed the following percentages of the emission limit values:
- Carbon monoxide 10%
  - Sulphur dioxide 20%
  - Oxides of nitrogen (NO & NO<sub>2</sub> expressed as NO<sub>2</sub>) 20%
  - Particulate matter 30%
  - Total organic carbon (TOC) 30%
  - Hydrogen chloride 40%
- (b) valid half-hourly average values shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals in condition 3.5.5 (a);
- (c) where it is necessary to calibrate or maintain the monitor and this means that data are not available for a complete half-hour period, the half-hourly average shall in any case be considered valid if measurements are available for a minimum of 20 minutes during the half-hour. The number of half-hourly averages so validated shall not exceed 5 per day;
- (d) daily average values shall be determined as the average of all the valid half-hourly average values within a calendar day. The daily average value shall be considered valid if no more than five half-hourly average values in any day have been determined not to be valid;
- (e) no more than ten daily average values per year shall be determined not to be valid.

## 3.6 Pests

3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.

3.6.2 The operator shall:

- (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
- (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## 3.7 Fire prevention

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

# 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 activities A1 to A3, referenced in schedule 1 table S1.1, 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.
  - (d) the functioning and monitoring of the incineration plant in a format agreed with the Environment Agency. The report shall, as a minimum requirement (as required by Chapter IV of the Industrial Emissions Directive) give an account of the running of the process and the emissions into air and water compared with the emission standards in the IED.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4 ; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.
- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

## 4.3 Notifications

4.3.1 In the event:

- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
  - (i) inform the Environment Agency,
  - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition the operator must immediately—
  - (i) inform the Environment Agency, and
  - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

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

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

Where the operator is a registered company:

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

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

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

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

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

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

## 4.4 Interpretation

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

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made “immediately”, in which case it may be provided by telephone.



# Schedule 1 – Operations

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
A1	S5.1 A1 (b)	The incineration of non-hazardous waste in a waste incineration plant with a capacity of 3 tonnes per hour or more.	From receipt of waste to emission of exhaust gas and disposal of waste arising. Waste types and quantities as specified in Tables S2.2 and S2.3 of this permit.
<b>Directly Associated Activity</b>			
A2	Electricity generation	Electricity generation in a steam turbine	From receipt of steam to export of electricity
A3	Surface water drainage	Transfer of surface water run-off into site drainage system	Uncontaminated surface water run-off transfer to site drainage system
<b>Activity reference</b>	<b>Description of activities for waste operations</b>		<b>Limits of activities</b>
A4	<p>R13: Storage of wastes 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 materials</p>		<p>From receipt of waste to transfer of treated waste to the RDF bunker and export of recyclable materials off-site</p> <p>Waste types and quantities as specified in Table S2.2 of this permit</p>
A5	<p>R13: Storage of wastes 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 materials</p>		<p>From receipt of waste to removal from site.</p> <p>Treatment consisting of sorting, separation, screening, baling and shredding</p> <p>Waste types and quantities as specified in Table S2.4 of this permit</p>
A6	<p>R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p>		<p>Waste storage during maintenance periods.</p> <p>Waste types and quantities as specified in Table S2.2 of this permit</p>
A7	<p>R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</p>		<p>Food waste storage</p> <p>Waste types and quantities as specified in Table S2.5 of this permit</p>

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 water discharge		Limits of activities
A8	Discharge of surface water from waste operation area of the site		Discharge of surface water from emission point W1

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Application documents: <ul style="list-style-type: none"> <li>Section II – summary of proposed changes</li> <li>Section III – Supporting information</li> </ul>	12/02/16
Response to Schedule 5 Notice dated 03/03/16	The response to questions 6 and 7 Odour management plan	24/03/16
Response to schedule 5 notice dated 06/04/16	Fire prevention plan	26/04/16

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	The Operator shall submit a written report to the Environment Agency on the commissioning of the installation. The report shall summarise the environmental performance of the plant as installed against the design parameters set out in the Application. The report shall also include a review of the performance of the facility against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions. This shall include a review of the odour management plan that was submitted with variation application EPR/QP3337AD/V002.	Within 4 months of the completion of commissioning.
IC2	The Operator shall carry out an assessment of the impact of emissions to air of the <i>following</i> component metals subject to emission limit values: <ul style="list-style-type: none"> <li>Cr (VI)</li> </ul> A report on the assessment shall be made to the Environment Agency.  Emissions monitoring data obtained during the first year of operation shall be used to compare the actual emissions with those assumed in the impact assessment submitted with the Application. An assessment shall be made of the impact z against the relevant EQS/EAL. In the event that the assessment shows that an EQS/EAL can be exceeded, the report shall include proposals for further investigative work.	15 months from commencement of operations
IC3	The Operator shall submit a written summary report to the Agency to confirm by the results of calibration and verification testing that the performance of Continuous Emission Monitors for parameters as specified in Table S3.1 and Table S3.1(a) complies with the requirements of BS EN 14181, specifically the requirements of QAL1, QAL2 and QAL3.	Initial calibration report to be submitted to the Agency within 3 months of completion of

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
		commissioning.  Full summary evidence compliance report to be submitted within 18 months of commissioning.
<b>IC4</b>	The Operator shall submit the written protocol referenced in condition 3.2.4 for the monitoring of soil and groundwater for approval by the Environment Agency. The protocol shall demonstrate how the Operator will meet the requirements of Articles 14(1)(b), 14(1)(e) and 16(2) of the IED. The procedure shall be implemented in accordance with the written approval from the Agency.	Within 12 months from completion of commissioning
<b>IC5</b>	The Operator shall submit a report to the Environment Agency on how emission of oxides of nitrogen compare with the emission limit value. The report shall include a proposal as to whether a lower emission limit is appropriate.	15 months from commencement of operations

<b>Table S1.4 Pre-operational measures</b>	
<b>Reference</b>	<b>Pre-operational measures</b>
<b>PO1</b>	<p>Prior to the commencement of commissioning, the Operator shall send a summary of the updated site Environment Management System (EMS) to the Environment Agency and make available for inspection all documents and procedures which form part of the EMS. The EMS shall be developed in line with the requirements set out in Section 1 of How to comply with your environmental permit – Getting the basics right.</p> <p>The documents and procedures set out in the EMS shall form the written management system referenced in condition 1.1.1 (a) of the permit.</p>
<b>PO2</b>	<p>Prior to the commencement of commissioning; the Operator shall provide a written commissioning plan, including timelines for completion, for approval by the Environment Agency. The commissioning plan shall include the expected emissions to the environment during the different stages of commissioning, the expected durations of commissioning activities and the actions to be taken to protect the environment and report to the Environment Agency in the event that actual emissions exceed expected emissions. Commissioning shall be carried out in accordance with the commissioning plan as approved.</p>
<b>PO3</b>	<p>At least three months before commissioning, the Operator shall submit a written report to the Environment Agency specifying arrangements for continuous and periodic monitoring of emissions to air to comply with Environment Agency guidance notes M1 and M2. The report shall include the following:</p> <ul style="list-style-type: none"> <li>• Plant and equipment details, including accreditation to MCERTS</li> <li>• Methods and standards for sampling and analysis</li> <li>• Details of monitoring locations, access and working platforms</li> </ul>

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

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Fuel Oil	< 0.1% sulphur content

Table S2.2 Permitted waste types and quantities for mechanical treatment plant and then gasification after treatment	
Maximum quantity	47,400 tonnes per year for mechanical treatment. 44,000 tonnes per year of waste for gasification after treatment. 2000 tonnes per year for storage prior to transfer off-site
Waste code	Description
<b>15</b>	<b>Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 03	wooden packaging
15 01 05	composite packaging
15 01 06	mixed packaging
<b>15 02</b>	<b>absorbents, filter materials, wiping cloths and protective clothing</b>
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
<b>17</b>	<b>Construction and demolition wastes (including excavated soil from contaminated sites)</b>
<b>17 02</b>	<b>wood, glass and plastic</b>
17 02 01	wood
17 02 03	plastic
<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 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
<b>19 05</b>	<b>wastes from aerobic treatment of solid wastes</b>
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 07	wood other than that mentioned in 19 12 06
19 12 10	combustible waste (refuse derived fuel)

<b>Table S2.2 Permitted waste types and quantities for mechanical treatment plant and then gasification after treatment</b>	
<b>Maximum quantity</b>	<b>47,400 tonnes per year for mechanical treatment. 44,000 tonnes per year of waste for gasification after treatment. 2000 tonnes per year for storage prior to transfer off-site</b>
<b>Waste code</b>	<b>Description</b>
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 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 99	other fractions not otherwise specified (comprising only of non-clinical human and animal offensive/hygiene waste (not arising from healthcare and/or related research i.e. not including waste from natal care, diagnosis, treatment or prevention of disease) which is not subject to special requirements in order to prevent infection)
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 01	biodegradable waste
20 02 03	other non-biodegradable wastes
<b>20 03</b>	<b>other municipal wastes</b>
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 07	bulky waste

<b>Table S2.3 Permitted waste types and quantities for gasification</b>	
<b>Maximum quantity</b>	<b>44,000 tonnes per year including waste from onsite mechanical treatment plant</b>
<b>Waste code</b>	<b>Description</b>
<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 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 10	combustible waste (refuse derived fuel)
<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 99	other fractions not otherwise specified (comprising only of non-clinical human and animal offensive/hygiene waste (not arising from healthcare and/or related research i.e. not including waste from natal care, diagnosis, treatment or prevention of disease) which is not subject to special requirements in order to prevent infection)

<b>Table S2.4 Permitted waste types and quantities for materials recovery facility</b>	
<b>Maximum quantity</b>	<b>32,600 tonnes per year</b>
<b>Waste code</b>	<b>Description</b>
<b>15</b>	<b>Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
<b>19</b>	<b>Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use</b>
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
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 10	combustible waste (refuse derived fuel)
<b>20</b>	<b>Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 39	plastics
20 01 40	metals

<b>Table S2.5 Permitted waste types and quantities for storage</b>	
<b>Maximum quantity</b>	<b>5000 tonnes per year</b>
<b>Waste code</b>	<b>Description</b>
<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 08	biodegradable kitchen and canteen waste



## Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location as shown on figure 2 in application EPR/QP3337AD/V002	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A5	Particulate matter	Incineration exhaust gases	30 mg/m <sup>3</sup>	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
A5	Particulate matter	Incineration exhaust gases	10 mg/m <sup>3</sup>	daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
A5	Total Organic Carbon (TOC)	Incineration exhaust gases	20 mg/m <sup>3</sup>	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
A5	Total Organic Carbon (TOC)	Incineration exhaust gases	10 mg/m <sup>3</sup>	daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
A5	Hydrogen chloride	Incineration exhaust gases	60 mg/m <sup>3</sup>	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
A5	Hydrogen chloride	Incineration exhaust gases	10 mg/m <sup>3</sup>	daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
A5	Hydrogen chloride	Incineration exhaust gases	20 mg/m <sup>3</sup>	periodic over minimum 1-hour period	Quarterly in first year. Then Bi-annual	BS EN 1911 Parts 1, 2 and 3
A5	Hydrogen fluoride	Incineration exhaust gases	2 mg/m <sup>3</sup>	periodic over minimum 1-hour period	Quarterly in first year. Then Bi-annual	BS ISO 15713

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location as shown on figure 2 in application EPR/QP3337AD/V002</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard(s) or method(s)</b>
A5	Carbon monoxide	Incineration exhaust gases	100 mg/m <sup>3</sup>	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
A5	Carbon monoxide	Incineration exhaust gases	50 mg/m <sup>3</sup>	daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
A5	Sulphur dioxide	Incineration exhaust gases	200 mg/m <sup>3</sup>	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
A5	Sulphur dioxide	Incineration exhaust gases	50 mg/m <sup>3</sup>	daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
A5	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Incineration exhaust gases	400 mg/m <sup>3</sup>	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
A5	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Incineration exhaust gases	200 mg/m <sup>3</sup>	daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
A5	Cadmium & thallium and their compounds (total)	Incineration exhaust gases	0.05 mg/m <sup>3</sup>	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 14385
A5	Mercury and its compounds	Incineration exhaust gases	0.05 mg/m <sup>3</sup>	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 13211

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location as shown on figure 2 in application EPR/QP3337AD/V002</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard(s) or method(s)</b>
A5	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	Incineration exhaust gases	0.5 mg/m <sup>3</sup>	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 14385
A5	Dioxins / furans (I-TEQ)	Incineration exhaust gases	0.1 ng/m <sup>3</sup>	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948 Parts 1, 2 and 3
A5	Dioxins / furans (WHO-TEQ Humans / Mammals)	Incineration exhaust gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948 Parts 1, 2 and 3
A5	Dioxins / furans (WHO-TEQ Fish)	Incineration exhaust gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948 Parts 1, 2 and 3
A5	Dioxins / furans (WHO-TEQ Birds)	Incineration exhaust gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948 Parts 1, 2 and 3
A5	Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	Incineration exhaust gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948-4
A5	Dioxin-like PCBs (WHO-TEQ Fish)	Incineration exhaust gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948-4
A5	Dioxin-like PCBs (WHO-	Incineration exhaust	No limit set	periodic over minimum 6 hours,	Quarterly in first year. Then Bi-	BS EN 1948-4

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location as shown on figure 2 in application EPR/QP3337AD/V002</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard(s) or method(s)</b>
	TEQ Birds)	gases		maximum 8 hour period	annual	
A5	Specific individual poly-cyclic aromatic hydrocarbons (PAHs), as specified in Schedule 6.	Incineration exhaust gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS ISO 11338 Parts 1 and 2.
A6	No parameters set	Carbon filter on waste processing building	No limits set	-	-	-
A7	No parameters set	Fuel tank vent	No limits set	-	-	-
A8	No parameters set	Lime and activated carbon vents	No limits set	-	-	-
A9	No parameters set	Ash quench steam release	No limits set	-	-	-

<b>Table S3.1(a) Point source emissions to air during abnormal operation of incineration plant – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A5	Particulate matter	Incineration exhaust gases	150 mg/m <sup>3</sup>	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 during abatement plant failure
A5	Total Organic Carbon (TOC)	Incineration exhaust gases	20 mg/m <sup>3</sup>	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 during abatement plant failure
A5	Carbon monoxide	Incineration exhaust gases	100 mg/m <sup>3</sup>	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 during abatement plant failure

<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>
W1 (Emission to unnamed Brook, as shown on figure 2 in application EPR/QP3337AD/V002)	Uncontaminated surface water run off via interceptor	No parameters set	No limits set	-	-	-

<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>
As identified in the Application EPR/JP3132LH/A001	Wind Speed and Direction	Continuous	Anemometer	
Location close to the Combustion Chamber inner wall or as identified and justified in Application.	Temperature (° C)	Continuous	Traceable to national standards	As agreed in writing with the Agency.
A5	Exhaust gas temperature	Continuous	Traceable to national standards	As agreed in writing with the Agency.
A5	Exhaust gas pressure	Continuous	Traceable to national standards	As agreed in writing with the Agency.
A5	Exhaust gas oxygen content	Continuous	BS EN 15267-3 BS EN 14181	
A5	Exhaust gas water vapour content	Continuous	BS EN 15267-3 BS EN 14181	Unless gas is dried before analysis of emissions.

**Table S3.4 Residue quality**

Emission point reference or source or description of point of measurement	Parameter	Limit	Monitoring frequency	Monitoring standard or method *	Other specifications
Bottom Ash	LOI	<5%	Monthly in the first year of operation. Then Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	
Bottom Ash	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.		Monthly in the first year of operation. Then Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	
Bottom Ash	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions		Before use of a new disposal or recycling route	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	
APC Residues	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.		Monthly in the first year of operation. Then Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	
APC Residues	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic,		Before use of a new disposal or recycling route	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling	

<b>Table S3.4 Residue quality</b>					
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Limit</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method *</b>	<b>Other specifications</b>
	Cobalt, Vanadium, Zinc) soluble fractions			and Analysis'	

\* Or other equivalent standard as agreed in writing with the Environment Agency.



## Schedule 4 – Reporting

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

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Emissions to air Parameters as required by condition 3.5.1	A5	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
LOI Parameters as required by condition 3.5.1	Bottom Ash	Quarterly (but monthly for the first year of operation)	1 Jan, 1 Apr, 1 Jul and 1 Oct
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.5.1	Bottom Ash	Quarterly (but monthly for the first year of operation)	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.5.1	Bottom Ash	Before use of a new disposal or recycling route	
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.5.1	APC Residues	Quarterly (but monthly for the first year of operation)	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.5.1	APC Residues	Before use of a new disposal or recycling route	
Functioning and monitoring of the incineration plant as required by condition 4.2.2		Annually	1 Jan

<b>Table S4.2: Annual production/treatment</b>	
<b>Parameter</b>	<b>Units</b>
Total Waste gasified	tonnes
Electrical energy produced	KWh
Thermal energy produced e.g. steam for export	KWh
Electrical energy exported	KWh
Electrical energy used on installation	KWh
Waste heat utilised by the installation	KWh

<b>Table S4.3 Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Electrical energy exported, imported and used at the installation	Quarterly	KWh / tonne of waste incinerated
Fuel oil consumption	Quarterly	Kg / tonne of waste incinerated
Mass of Bottom Ash produced	Quarterly	Kg / tonne of waste incinerated
Mass of APC residues produced	Quarterly	Kg / tonne of waste incinerated
Mass of Other solid residues produced	Quarterly	Kg / tonne of waste incinerated
Activated Carbon consumption	Quarterly	Kg / tonne of waste incinerated
Lime consumption	Quarterly	Kg / tonne of waste incinerated
Water consumption	Quarterly	Kg / tonne of waste incinerated
Periods of abnormal operation	Quarterly	No of occasions and cumulative hours for current calendar year for each line.

<b>Table S4.4 Reporting forms</b>		
<b>Media/parameter</b>	<b>Reporting format</b>	<b>Date of form</b>
Air	Forms air 1-7 or other form as agreed in writing by the Environment Agency	11/05/16
Water and raw material usage	Form WU/RM1 1 or other form as agreed in writing by the Environment Agency	11/05/16
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	11/05/16
Waste disposal/recovery	Form R1 or other form as agreed in writing by the Environment Agency	11/05/16
Residue quality	Form residues 1 or other form as agreed in writing by the Environment Agency	11/05/16

<b>Table S4.4 Reporting forms</b>		
<b>Media/parameter</b>	<b>Reporting format</b>	<b>Date of form</b>
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	11/05/16

# 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

“abatement equipment” means that equipment dedicated to the removal of polluting substances from releases from the installation to air or water media.

“*abnormal operation*” means any technically unavoidable stoppages, disturbances, or failures of the abatement plant or the measurement devices, during which the emissions into the air and the discharges of waste water may exceed the prescribed emission limit values

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

“APC residues” means air pollution control residues

“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.

“bottom ash” means ash discharged at the end of the gasification grate.

“CEM” Continuous emission monitor

“CEN” means Comité Européen de Normalisation “bi-annual” means twice per year with at least five months between tests;

“Commissioning” means testing of the new incineration plant that involves any operation of the furnace.

“daily average” for releases of substances to air means the average of valid half-hourly averages over a calendar day during normal operation.

“dioxin and furans” means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

“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.

“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.

“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.

“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.

“incineration line” means all of the incineration equipment related to a common discharge to air location.

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

“ISO” means International Standards Organisation.

‘*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

“LOI” means loss on ignition a technique used to determine the combustible material by heating the ash residue to a high temperature

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

“PAH” means Poly-cyclic aromatic hydrocarbon, and comprises Anthanthrene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[b]naph(2,1-d)thiophene, Benzo[c]phenanthrene, Benzo[ghi]perylene, Benzo[a]pyrene, Cholanthrene, Chrysene, Cyclopenta[c,d]pyrene, Dibenz[ah]anthracene, Dibenz[a,i]pyrene Fluoranthene, Indo[1,2,3-cd]pyrene, Naphthalene

“PCB” means Polychlorinated Biphenyl. Dioxin-like PCBs are the non-ortho and mono-ortho PCBs listed in the table below.

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.

“shut down” is any period where the plant is being returned to a non-operational state and there is no waste being burned or agreed in writing with the Environment Agency.

“start up” is any period, where the plant has been non-operational, after igniting the auxiliary burner, until waste has been fed to the plant in sufficient quantity to cover the grate and to initiate steady-state conditions or agreed in writing with the Environment Agency.

“TOC” means Total Organic Carbon. In respect of releases to air, this means the gaseous and vaporous organic substances, expressed as TOC.

‘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

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:

(a) in relation to gases from incineration plants other than those burning waste oil, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry.

For dioxins/furans and dioxin-like PCBs the determination of the toxic equivalence concentration (I-TEQ, & WHO-TEQ for dioxins/furans, WHO-TEQ for dioxin-like PCBs) stated as a release limit and/ or reporting requirement, the mass concentrations of the following congeners have to be multiplied with their respective toxic equivalence factors before summing. When reporting on measurements of dioxins/furans and dioxin-like PCBs, the toxic equivalence concentrations should be reported as a range based on: all congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum. However the minimum value should be used when assessing compliance with the emission limit value in table S3.1.

<b>TEF schemes for dioxins and furans</b>				
<b>Congener</b>	<b>I-TEF</b>	<b>WHO-TEF</b>		
	<b>1990</b>	<b>2005</b>	<b>1997/8</b>	
		<b>Humans / Mammals</b>	<b>Fish</b>	<b>Birds</b>
<b>Dioxins</b>				
2,3,7,8-TCDD	1	1	1	1
1,2,3,7,8-PeCDD	0.5	1	1	1
1,2,3,4,7,8-HxCDD	0.1	0.1	0.5	0.05

TEF schemes for dioxins and furans				
Congener	I-TEF	WHO-TEF		
	1990	2005	1997/8	
1,2,3,6,7,8-HxCDD	0.1	0.1	0.01	0.01
1,2,3,7,8,9-HxCDD	0.1	0.1	0.01	0.1
1,2,3,4,6,7,8-HpCDD	0.01	0.01	0.001	<0.001
OCDD	0.001	0.0003	-	-
<b>Furans</b>				
2,3,7,8-TCDF	0.1	0.1	0.05	1
1,2,3,7,8-PeCDF	0.05	0.03	0.05	0.1
2,3,4,7,8-PeCDF	0.5	0.3	0.5	1
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,7,8,9-HxCDF	0.1	0.1	0.1	0.1
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1	0.1
2,3,4,6,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,4,6,7,8-HpCDF	0.01	0.01	0.01	0.01
1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.01	0.01
OCDF	0.001	0.0003	0.0001	0.0001

TEF schemes for dioxin-like PCBs			
Congener	WHO-TEF		
	2005	1997/8	
	Humans / mammals	Fish	Birds
<b>Non-ortho PCBs</b>			
3,4,4',5-TCB (81)	0.0001	0.0005	0.1
3,3',4,4'-TCB (77)	0.0003	0.0001	0.05
3,3',4,4',5 - PeCB (126)	0.1	0.005	0.1
3,3',4,4',5,5'-HxCB(169)	0.03	0.00005	0.001
<b>Mono-ortho PCBs</b>			
2,3,3',4,4'-PeCB (105)	0.00003	<0.000005	0.0001
2,3,4,4',5-PeCB (114)	0.00003	<0.000005	0.0001
2,3',4,4',5-PeCB (118)	0.00003	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.00003	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.00003	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.00003	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00003	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.00003	<0.000005	0.00001



“year” means calendar year ending 31 December.

## Schedule 7 – Site plan



©Crown Copyright. All rights reserved. Environment Agency, 100024198, 2016

END OF PERMIT