Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

SITA Surrey Limited

Charlton Lane Eco Park
Charlton Lane
Shepperton
TW17 8QA

Variation application number

EPR/VP3997NK/V005

Consolidated permit number

EPR/VP3997NK

Charlton Lane Eco Park
Consolidated permit number EPR/VP3997NK

Introductory note

This introductory note does not form a part of the permit

The following notice gives notice of the variation and consolidation of environmental permits A and B referred to in the status logs below. Both permits have been varied, as described in more detail below, and consolidated into a single permit.

Under the Environmental Permitting (England & Wales) Regulations 2010 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and Schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

SITA Surrey Limited has applied to vary the Environmental Permit EPR/VP3997NK for the Charlton Lane Eco Park.

The main changes to the gasification installation are as follows:

- A change in gasification technology from a batch gasifier to a fluidised bed-gasifier.
- Deletion of conditions 2.3.13 and 2.3.14 (as numbered in EPR/VP3997NK/V003).
- Removal of emission points to air A2 and A3.
- Removal of boiler protection vents.
- Deletion of pre-operational condition PO13 (as numbered in EPR/VP3997NK/V003) relating to boiler protection vents.
- A reduction in the capacity of the gasification installation from 60,000 t/yr to 55,460 t/yr.
- A reduction in the number of air cooled condensers from nine to two.
- A change in the acid gas reagent from sodium bicarbonate to lime.
- Amendment of the monitoring requirements for CO to a 10 minutes average reference period.
- Addition of Selective Catalytic Reduction (SCR) for secondary NO_x reduction.

The main changes to the anaerobic digestion (AD) installation are as follows:

- Increase the electrical output of the CHP engines to 1.778 MW.
- Change emission limit values for the gas engines: SO_2 to 350 mg/m^3, and CO to 1400 mg/m^3 to align the emission limits with those in the standard rules permit for AD. Emissions for NO_x and VOCs are unchanged.
- Change the emission limit value for SO_2 from the flare to 395 mg/m^3 to accommodate the change in SO_2 emission limit from the gas engines.
- The addition of a second waste dissolver to increase the resilience of the process.
- The addition of a manual wash-down adjacent to the reception hall to comply with the Animal By Product Regulations.

Other changes are as follows:

- The addition of a road sweepings bulking facility (activity A8).
- A change in the odour control system to activated carbon filters with release via a flue within a common windshield.
- Addition of two new pre-operational conditions, PO14 and PO15 relating to drainage and secondary containment.
- Addition of a limit in table S1.1 for waste operations A6 and A7 specifying that wastes that have the potential to be odorous shall be processed and removed from the site within 72 hours of acceptance on site or within a timescale as agreed in writing with the Environment Agency.

The Charlton Lane Eco Park will comprise the following listed activities:

- 5.4 A(1)(b)(i) an anaerobic digestion (AD) installation feeding a combined heat and power (CHP) plant;
- 5.1A(1)(b) a waste gasification installation;

And the following waste operations:

- a recyclables bulking facility;
- a road sweeping bulking facility;
- a community recycling centre.

The permit implements primarily the requirements of the EU Directives on Industrial Emissions and Waste.

It is estimated that in total the Installation will generate approximately 5.4 MW of electricity. Electricity will be generated from the gasification installation (3.65 MW) and CHP plant (1.78 MW). Additionally, photovoltaic cells will generate approximately 0.16 MW though these are not regulated by the Environmental Permit. Approximately 1.85 MWe of electricity will be used by the gasification plant and AD/CHP plant, with the remainder being used by other parts of the installation or exported to the National Grid.

The Waste Gasification Installation

The Applicant has described the incineration installation as a gasification installation. Our view is that for the purposes of IED (in particular Chapter IV) and EPR, the installation is a waste incineration plant because, notwithstanding the fact that energy will be recovered from the process, the process is never the less 'incineration' because it is considered that its main purpose is the thermal treatment of waste. IED defines an incineration plant as any stationary or mobile technical unit and equipment dedicated to the thermal treatment of wastes with or without recovery of the combustion heat generated including: the incineration by oxidation of waste; and other thermal treatment processes such as pyrolysis, gasification or plasma processes in so far as the substances resulting from the treatment are subsequently incinerated.

The waste gasification plant will accept 55,460 tonnes per year of waste. Pre-treatment will remove approximately 10,750 tonnes per annum, therefore the plant will gasify up to 44,710 tonnes per annum of this waste and recover energy in the form of steam, which will be used to produce electricity for export to the National Grid and potentially supply heat to users nearby.

In outline, the gasification process will be as follows:

- There will be 1 gasification line.

- Up to 55,460 tonnes per year of waste will be delivered to site and stored in the reception hall.
- Waste will consist of: non-hazardous residual waste; residual waste from Household Waste Recycling Centres (HWRC); residual waste from Material Recovery Facilities (MRF); commercial and industrial waste; and Animal By-Product Regulations (ABPR) Category 1 waste.
- The installation will include a pre-treatment line consisting of a shredder, trommel, magnet, eddy current, ballistic separator, air belt separator and secondary shredder. The pre-treatment recovers recyclables from the waste and processes it to form refuse derived fuel (RDF) for gasification.
- The fluidised bed gasifier is a single vessel.
- In the gasification zone a “bed” of solid sand-like particles is contained in the bottom region of the vessel and as air passes upwards it suspends sand in the air stream.
- When the fuel is introduced onto the bed it is heated as it comes into contact with the hot sand and undergoes the gasification reaction, producing syngas.
- Above the fluidised bed, the syngas is sampled in the gasification zone.
- The secondary air injection is then introduced at multiple levels and is followed by an additional combustion zone where the syngas will be fully combusted.
- Emissions of nitrogen dioxide will be controlled by the injection of urea into the combustion zone.
- The hot combustion gases will pass through a boiler to recover energy in the form of steam. The steam will then be used to generate electricity in a steam turbine, before being condensed in an air-cooled condenser.
- The combustion gases which exit the boiler will be cleaned in a multicyclone to reduce particulate levels.
- Further nitrogen dioxide reduction will be achieved using selective catalytic reduction (SCR).
- Acid gases will be neutralised by the injection of hydrated lime into the flue gas stream.
- Heavy metals will be removed from flue gases by the injection of powdered activated carbon into the flue gas.
- Particle removal will be by bag filters.
- The combustion gases will be released to atmosphere via a 49 m high stack.
- The ash residues will be collected in separate containers. The Incinerator Bottom Ash (IBA) will be collected from the fluidised bed and transferred offsite as non-hazardous waste for treatment or be disposed of to landfill. Boiler ash will be collected and transferred off-site as non-hazardous waste for recovery. Air Pollution Control Residues (APCr), including fly ash, will be collected in a dedicated silo and transferred off-site as hazardous waste.

Anaerobic Digestion (AD) Installation

The plant will operate two AD vessels. The vessels will be fed with food waste after the removal of undesirable 'contamination' such as plastic, stones, glass etc, and the addition of dilution water. Each digester will have a design capacity of 128 wet tonnes per day of organic material. The plant will output up to 880 m^3 per hour biogas with a net calorific value of 22.2 MJ/Nm^3. The biogas will be captured from the anaerobic digestion tanks and will be piped to a gas holder.

The slurry digestate from the anaerobic digestion process will be de-watered in a centrifuge. About 16,000 tonnes per annum of digestate cake will be transferred offsite to be spread to agricultural

land as a soil enhancer. The liquor from the de-watering process will be collected for reuse in the waste dissolvers, cleaned, and part will be discharged to sewer.

CHP Plant and Flare

The CHP units will consist of two gas engines. Electricity will be generated from the combustion of biogas. Heat will be recovered from the cooling jacket, oil lubrication system and flue gases. Electricity from the CHP engines will be exported to the national grid whilst the heat from the process will be used within the anaerobic digestion plant to run the pasteurisation process.

The flare stack is designed to operate in the event that more biogas is generated than can be combusted in the engine. The flare stack will normally only be required to operate when the CHP engines are not in use for routine maintenance and are offline and are therefore not available to use the biogas produced by the digester.

Road sweepings bulking facility

The road sweeping bulking facility is separate from the gasification installation, although it takes place in the same building. It will be used for the treatment of road sweepings which will have been collected off-site and delivered to the installation for bulking up as waste code 20 03 03. The annual throughput for the facility will be 2,660 tonnes per annum with the maximum storage at any one time being 100 tonnes.

Vehicles will discharge their contents onto a concrete floor. The area will be a bulking bay with push-walls and a concrete floor sloping slightly to a drainage system and below-ground tank. Grit and small particles will be prevented from falling into the catch pit and below-ground tank by a grating cover. The maximum storage capacity for grit will be 90 tonnes.

Effluent from the sweepings will be collected in a 10 m^3 tank and will be transferred off-site using a vacuum tanker ready to be transferred off-site to a suitably licensed facility.

Site Location

The Eco Park development is located on approximately 4.5 hectares of land to the south east of Charlton Village and west of Upper Halliford.

The following Habitats sites are located within 10 km of the installation: South West London Water Bodies (Ramsar & SPA); Thursley, Ash, Pirbright and Chobham Common (SAC); and Thames Basin Heath (SPA).

There are no Sites of Specific Scientific Interest within 2 km of the site, but there are 13 non-statutory local wildlife and conservation sites within this distance.

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

Status log of permit A: EPR/VP3997NK

Description	Date	Comments
Waste Management Licence EAWML 80619	15/11/04	Issued to Surrey Waste Management Limited
Modified EAWML 80619	27/02/08	Incorporated activities from EAWML 83092
Modified EAWML 80619	07/11/08	
Received notification of change of company name	21/10/10	
Issue of updated permit pages to show change of company name	12/11/10	Change of company name to SITA Surrey Limited (EPR reference: EPR/VP3997NK)

Status log of permit A: EPR/VP3997NK		
Description	**Date**	**Comments**
Application for Variation EPR/VP3997NK/V003	Duly Made 20/01/11	Application to add an anaerobic digestion installation, gas engines and a gasification installation to Permit.
Additional information received	15/04/11	Applicant provided corrected plant layout for Anaerobic Digestion plant.
Additional information received	09/05/11	Response to 06/04/11 schedule 5 notice.
Additional information received	21/06/11, 04/07/11 & 28/07/11	Response to 18/05/11 schedule 5 notice.
Additional information received	08/07/11	Response to 08/07/11 email querying errors in 18/05/11 schedule 5 notice.
Additional information received	09/08/11	Response to 08/07/11 schedule 5 notice.
Additional information received	22/08/11	Replacement of abnormal emissions report received on 08/07/11. Revised version of response to 08/07/11 schedule 5 notice.
Additional information received	29/09/11	Replacement of revised response to our schedule 5 notice dated 08/07/11 which was received on 22/08/11. To correct errors in flare stack emission table 8.1.
Additional information received	28/10/11	Response to 14/10/11 schedule 5 notice.
Additional information received	22/11/11	Email confirming errors in response to 14/10/11 schedule 5 notice, which will be corrected in response to 23/11/11 schedule 5 notice.
Additional information received	22/12/11	Response to 23/11/11 schedule 5 notice, which amended dispersion model data to correct for error in building width and boiler protect vent height.
Additional information received	21/02/12	Revised response to 23/11/11 schedule 5 notice, which corrected errors and omissions in 22/12/11 submission. Also covering email included details of lightening protection, and digester capacity.
Additional information received	07/03/12	Email regarding shut down of primary gasification chambers.
Additional information received	16/03/12	Revised response to 23/11/11 schedule 5 notice.
Additional information received	16/05/12	Email confirming AD plant capacity.
Additional information received	21/05/12	Email confirming energy generation and CHP energy recovery.
Additional information received	16/08/12	Emails regarding the possibility of re-routing the boiler protection vents.
Additional information received	28/09/12	Email confirming the operational temperature of the primary gasification chambers.
Variation determined EPR/VP3997NK/V003 (varied and consolidated permit issued)	08/10/12	
Agency variation determined EPR/VP3997NK/V004	30/05/13	Agency variation to implement the changes introduced by IED
Application EPR/VP3997NK/V005 received (variation and consolidation)	Duly made 27/11/13	Application to: change the gasification technology to fluidised bed gasifier; modify the AD installation; and add a road sweeping bulking facility.
Additional information received	21/02/14	Response to Schedule 5 notice sent on 30/01/14.
Additional information received	05/03/14	Response to Schedule 5 notice sent on 30/01/14 which clarified information from the 21/02/14 submission.
Additional information received	05/03/14	Response to Schedule 5 notice sent on 11/02/14.

Status log of permit A: EPR/VP3997NK		
Description	**Date**	**Comments**
Additional information received	13/03/14	Email clarifying noise modelling in response to Schedule 5 notice sent on 11/02/14.
Additional information received	14/03/14	Email clarifying noise modelling in response to Schedule 5 notice sent on 11/02/14.
Additional information received	04/04/14	Email regarding the Human Health Risk Assessment.
Additional information received	07/04/14	Email regarding site layout plans.
Additional information received	08/05/14	Email correcting response (dated 21/02/14) to question 21 of the Schedule 5 sent on 30/01/14.
Additional information received	16/05/14	Memo responding to further information requested on 10/4/14 which clarifies details about the Greenhouse Gas Assessment, Road Sweeping Bulking Facility, Boiler Protection Vents, Bottom Ash and APC Residue processing and AD installation.
Additional information received	16/05/14	Email summarising status of the planning permission.
Additional information received	20/05/14	Email clarifying the location of the syngas sampling points and location of predicted concentrations in the abnormal emissions assessment.
Additional information received	29/05/14	Memo – justification for gasification (document dated 27/05/14).
Additional information received	06/06/14	Email including: clarifications about the AD plant; revised site plan; revised AD process diagram; and correction of Specific Energy Consumption calculation.
Additional information received	19/06/14	Email clarifying how SCADA system works.
Additional information received	03/07/14	Email clarifying waste operations
Additional information received	03/07/14	Two emails describing the AD bund and penstock valve.
Additional information received	04/07/14	Revised site plan.
Additional information received	10/07/14	Email summarising waste acceptance during gasifier downtime.
Additional information received	17/09/14	Request to withdraw from the application the request to add waste codes 02 01 02, 02 01 06, 02 02 02 and 02 02 03 to the gasifier.
Additional information received	24/09/14	Clarifications
Additional information received	06/10/14	Clarifications
Additional information received	09/10/14	Planning permission update
Additional information received	16/10/14	Clarifications
Variation determined EPR/VP3997NK/V005 (Billing ref for gasification plant and AD plant JP3435NP. Billing ref for waste operations EAWML 80619)	29/10/14	Varied and consolidated permit issued in modern condition format

Status log of permit B: EAWML 83092		
Description	**Date**	**Comments**
Waste Disposal Licence SCC/2/1 issued to Surrey County Council	01/10/85	
Modification	13/10/94	
Waste Management Licence 83092 issued to Surrey County Council	01/04/96	(supersedes WDL SCC/2/1)
Modification	31/10/97	
Modification	27/04/99	
Application to transfer from Surrey County Council to Surrey Waste Management Ltd	25/08/99	
Permit transfer determined	17/04/00	
Modification	17/04/00	
Modification	09/05/01	
Modification	05/12/03	
Modification	18/07/06	
Received notification of change of company name	21/10/10	(EPR/NP3493EY)
Issue of updated permit pages to show change of company name	12/11/10	
Application EPR/VP3997NK/V005 (variation and consolidation)	Duly made 27/11/13	Application to consolidate EAWML 83092 (EPR/NP3493EY) with permit EPR/VP3997NK and vary and update the permit to modern conditions.
Variation determined EPR/VP3997NK/V005	29/10/14	Varied and consolidated permit issued in modern condition format. EAWML 83092 ceases to exist.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

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

Permit numbers
EPR/VP3997NK/V005
EAWML 83092

Issued to
SITA Surrey Limited ("the operator"),

whose registered office is

SITA House
Grenfell Road
Maidenhead
Berkshire
SL6 1ES

company registration number **03184332**

to operate regulated facilities at

Charlton Lane Eco Park
Charlton Lane
Shepperton
TW17 8QA

to the extent set out in the schedules

The notice shall take effect from 29/10/14

The number of the consolidated permit is EPR/VP3997NK.

Name	Date
Claire Roberts	**29/10/2014**

Authorised on behalf of the Environment Agency

Schedule 1

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

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number
EPR/VP3997NK

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/VP3997NK/V005 authorising,

SITA Surrey Limited ("the operator"),

whose registered office is

SITA House
Grenfell Road
Maidenhead
Berkshire
SL6 1ES

company registration number **03184332**

to operate regulated facilities at

Charlton Lane Eco Park
Charlton Lane
Shepperton
TW17 8QA

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

Name	Date
Claire Roberts	**29/10/2014**

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 A5 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 practicability of Combined Heat and Power (CHP) implementation at least every 2 years. The results shall be reported to the Agency within 2 months of each review.

1.3 Efficient use of raw materials

1.3.1 For activities A1 to A5 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 in condition 2.3.3 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 (a) 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.

(b) 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.

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

2.3.3 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 activity A1 referenced in schedule 1, table S1.1, it having been separately collected for recycling, it is subsequently unsuitable for recovery.

2.3.4 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.

2.3.5 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.

2.3.6 For activity A1 referenced in schedule 1, table S1.1, waste shall not be charged, or shall cease to be charged, if:

(a) the gasification combustion zone temperature is below, or falls below, 850^{o}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.

2.3.7 For activity A1 referenced in schedule 1, table S1.1,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 2.3.6, as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.3.6 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.

2.3.8 For activity A1, referenced in schedule 1, table S1.1, the operator shall record the beginning and end of each period of “abnormal operation”.

2.3.9 For activity A1, referenced in schedule 1, table S1.1, 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.

2.3.10 For activity A1, referenced in schedule 1, table S1.1, 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 detailed in the application or as agreed in writing with the Environment Agency, are unavailable.

2.3.11 For activity A1, referenced in schedule 1, table S1.1, 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.

2.3.12 For activity A1, referenced in schedule 1, table S1.1, bottom ash, boiler ash and APC residues shall not be mixed.

2.4 Improvement programme

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

2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

2.5 Pre-operational conditions

2.5.1 For activities A1 to A5 referenced in schedule 1, table S1.1, the activities shall not be brought into operation until the measures specified in schedule 1 table S1.4 have been completed.

2.6 Technical requirements

WEEE treatment

2.6.1 The storage (including temporary storage) and treatment of WEEE shall be carried out in accordance with the technical requirements of Annex VIII of the WEEE Directive.

2.6.2 WEEE shall be treated using best available treatment, recovery and recycling techniques (BATRRT).

2.6.3 As a minimum, the substances, preparations and components specified in table 2.4 shall be removed from any separately collected WEEE.

Table 2.4 Substances, preparations and components to be removed from separately collected WEEE

- Capacitors containing Polychlorinated biphenyls (PCB)
- Mercury-containing components, such as switches or backlighting lamps
- Batteries
- Printed circuit boards of mobile phones generally, and of other devices if the surface of the printed circuit board is greater than 10 square centimetres
- Toner cartridges, liquid and pasty, 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
- 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
- Electrolytic capacitors containing “substances of concern” (height > 25mm, diameter > 25 mm or proportionately similar volume)

2.6.4 All fluids contained within any WEEE shall be removed prior to further treatment.

2.6.5 Separately collected components of WEEE specified in table 2.5 shall be treated in accordance with the methods specified in that table.

Table 2.5 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.

2.6.6 Equipment shall be provided to record the weight of untreated WEEE accepted at, and components and materials leaving the site.

Hazardous waste storage and treatment

2.6.7 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.

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, S3.2 and S3.3 except when activity A1 referenced in schedule 1, table S1.1 is 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 S3.5. 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 groundwater at least once every 5 years; and of soil at least once every 10 years; to the protocol agreed in writing with the Environment Agency under PO13.

3.3 Odour

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

3.3.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;

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

3.4 Noise and vibration

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

3.4.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;

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

3.5 Monitoring

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

(a) point source emissions specified in tables S3.1, S3.1(a), S3.2 and S3.3;

(b) process monitoring specified in table S3.4;

(c) residue quality specified in table S3.5.

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), S3.2 and S3.3 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:

- Carbon monoxide 10%
- Sulphur dioxide 20%
- Oxides of nitrogen (NO & NO_2 expressed as NO_2) 20%
- Particulate matter 30%

- Total organic carbon (TOC) 30%
- Hydrogen chloride 40%

(b) valid half-hourly average values or 10-minute averages 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 or 10-minute average shall in any case be considered valid if measurements are available for a minimum of 20 minutes or 7 minutes during the half-hour or 10-minute period respectively. The number of half-hourly or 10-minute averages so validated shall not exceed 5 or 15 respectively per day;

(d) daily average values shall be determined as the average of all the valid half-hourly or 10-minute average values within a calendar day. The daily average value shall be considered valid if no more than five half-hourly average or 15 10-minute 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.

4 Information

4.1 Records

4.1.1 All records required to be made by this permit shall:

(a) be legible;

(b) be made as soon as reasonably practicable;

(c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and

(d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:

(i) off-site environmental effects; and

(ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

(a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;

(b) the annual production/ treatment data set out in schedule 4 table S4.2; and

(c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

(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 The operator shall

(a) in the event 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) in the event 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) in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

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

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

Where the operator is a registered company:

(a) any change in the operator's trading name, registered name or registered office address; and

(b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

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

(a) any change in the operator's name or address; and

(b) any steps taken with a view to the dissolution of the operator.

In any other case:

(a) the death of any of the named operators (where the operator consists of more than one named individual);

(b) any change in the operator's name(s) or address(es); and

(c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

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

(a) the Environment Agency shall be notified at least 14 days before making the change; and

(b) the notification shall contain a description of the proposed change in operation.

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

4.4 Interpretation

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

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "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**	**Limits of specified activity**
A1	S5.1A(1)(b)	**Gasification** The incineration of non-hazardous waste in a waste incineration plant with a capacity exceeding 3 tonnes per hour.	From receipt of waste, including pre-treatment by shredding, screening and separation, to emission of exhaust gas and disposal of waste arising. Waste types and quantities as specified in Table S2.2 of this permit.
A2	S5.4A(1)(b)(i)	**Anaerobic Digestion** Recovery or a mix of recovery and disposal of non-hazardous waste in a facility with a capacity exceeding 100 tonnes per day. **R13**: Storage of wastes pending the operations numbered R1 and R3. **R3**: Recycling or reclamation of organic substances that are not used as solvents.	Receipt and storage of waste. Treatment of waste including shredding, sorting, screening, compaction, baling, mixing, water addition and maceration. Digestion of wastes including pasteurisation and chemical addition. Biogas storage and drying. Treatment of digestate including screening to remove plastic residues, centrifuge and pressing, ready for transfer offsite. Waste types and quantities as specified in Table S2.3 of this permit.
	Directly Associated Activities		
A3	Electricity Generation	Generation of 3.65 MWe electrical power using a steam turbine from energy recovered from the gasification plant flue gases.	
A4	Electricity Generation	Generation of 1.78 MWe electrical power from biogas using gas engines. **R1:** Use principally as a fuel or other means to generate energy.	From receipt of biogas produced by anaerobic digestion plant to the supply of power and the emission of exhaust gases.
A5	Biogas Flare	Use of an auxiliary flare to burn biogas, required only for short periods of break down or maintenance of facility **D10:** Incineration on land	From receipt of biogas produced by anaerobic digestion plant to the combustion of the biogas and the emission of exhaust gases.

	Description of activities for waste operations	Limits of activities
A6	**Community Recycling Centre** **R3**: Recycling/reclamation of organic substances which are not used as solvents **R4**: Recycling/reclamation of metals and metal compounds **R5**: Recycling/reclamation of other inorganic materials **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 **D14:** Repackaging prior to submission to any of the operations numbered D1 to 13 **D15:** Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)	Treatment consisting of manual sorting and compaction of waste into different components for recovery. For WEEE only: Treatment consisting only of sorting, dismantling, separation, shredding, screening, grading, baling, shearing, compacting, crushing, granulation, repair or refurbishment, or cutting of waste into different components for recovery. The maximum quantity of hazardous waste received at the site shall not exceed 10 tonnes per day. Except for WEEE awaiting manual dismantling, repair or refurbishment only the maximum quantity of hazardous waste that can be stored at the site shall not exceed 50 tonnes at any one time. There shall be no mixing of hazardous and non-hazardous waste. Wastes shall be stored for no longer than 1 year prior to disposal and 3 years prior to recovery. Waste types as specified in Table S2.4. The total combined quantity of waste for activities A6 and A7 shall not exceed 250,000 tonnes per year. Wastes that have the potential to be odorous shall be processed and removed from the site within 72 hours of acceptance on site or within a timescale as agreed in writing with the Environment Agency.
A7	**Recyclables Bulking Facility** **R3**: Recycling/reclamation of organic substances which are not used as solvents **R4**: Recycling/reclamation of metals and metal compounds **R5**: Recycling/reclamation of other inorganic materials **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 **D14**: Repackaging prior to submission to any of the operations numbered D1 to 13 **D15**: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)	Treatment consisting of manual sorting, compaction and baling of waste into different components for recovery. For WEEE only: Treatment consisting only of sorting, dismantling, separation, shredding, screening, grading, baling, shearing, compacting, crushing, granulation, repair or refurbishment, or cutting of waste into different components for recovery. The maximum quantity of hazardous waste received at the site shall not exceed 10 tonnes per day. Except for WEEE awaiting manual dismantling, repair or refurbishment only the maximum quantity of hazardous waste that can be stored at the site shall not exceed 50 tonnes at any one time. There shall be no mixing of hazardous and non-hazardous waste. Wastes shall be stored for no longer than 1 year prior to disposal and 3 years prior to recovery. Waste types as specified in Table S2.4. The total combined quantity of waste for activities A6 and A7 shall not exceed 250,000 tonnes per year. Wastes that have the potential to be odorous shall be processed and removed from the site within 72 hours of acceptance on site or within a timescale as agreed in writing with the Environment Agency.

A8	**Road Sweepings Bulking Facility** **D9** Physico-chemical treatment not specified elsewhere in Annex IIA which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D8 and D10 to D12.	Treatment consisting only of separation of non-hazardous waste into different components for disposal (no more than 50 tonnes per day) or recovery. Waste types and quantities as specified in Table S2.5.

Table S1.2 Operating techniques

Description	Parts	Date Received
Working Plan for CRC and RBF	Working Plan - Charlton Lane Waste Transfer Station Community Recycling Centre & MRF - Issue 4.2 (September 2009)	01/09/09 (approved 25/11/09)
Response to Schedule 5 Notice (sent on 6/4/11)	Answers to questions 2, 3, 4, 5, 6, & 12 (relating to AD sludge only).	09/05/11
Application EPR/VP3997NK/V005	Operating Techniques detailed in part C3, section 3a of the application form.	Received 25/09/13 Duly Made 27/11/13
Application EPR/VP3997NK/V005	"EP Variation Supporting Information" document, Section 1.5.3 relating to incineration capacity.	Received 25/09/13 Duly Made 27/11/13
Application EPR/VP3997NK/V005	"EP Variation Supporting Information" document, Section 2.4.1.2 and 2.4.1.3 relating to description of waste types permitted for incineration and AD respectively.	Received 25/09/13 Duly Made 27/11/13
Application EPR/VP3997NK/V005	"EP Variation Supporting Information" document, section 2.5.1.4 relating to waste charging.	Received 25/09/13 Duly Made 27/11/13
Application EPR/VP3997NK/V005	"EP Variation Supporting Information" document, sections 1.5.3, 2.1.3.2 and 2.3.1.1 relating to start-up and shut-down.	Received 25/09/13 Duly Made 27/11/13
Application EPR/VP3997NK/V005	"EP Variation Supporting Information" document, sections 2.3.2.1 and 2.5.1.1 relating to temperature monitoring in the combustion chamber.	Received 25/09/13 Duly Made 27/11/13
Application EPR/VP3997NK/V005	"EP Variation Supporting Information" document, sections 1.5.4, 2.4.6.1 and 2.6.1 relating to energy recovery from the installation.	Received 25/09/13 Duly Made 27/11/13
Application EPR/VP3997NK/V005	"EP Variation Supporting Information" document, section 1.5.8 and 2.3.1.1 relating to monitoring of emissions to air.	Received 25/09/13 Duly Made 27/11/13
Application EPR/VP3997NK/V005	"EP Variation Supporting Information" document, section 1.5.8 and 2.3.1.1 relating to monitoring during abnormal operation (CEM failure).	Received 25/09/13 Duly Made 27/11/13
Application EPR/VP3997NK/V005	"EP Variation Supporting Information" document, section 1.5.2.1 relating to incoming waste acceptance	Received 25/09/13 Duly Made 27/11/13
Application EPR/VP3997NK/V005	"EP Variation Supporting Information" document, section 1.7.1 ,1.7.2 and 1.7.3 relating to the Community Recycling Centre, Recyclables Bulking Facility and Road Sweepings Bulking Facility.	Received 25/09/13 Duly Made 27/11/13
Response to Schedule 5 notice (sent on 30/01/14)	Response to question 3 including the referenced diagram in Appendix B: Gasification plant design (general process flow). Response to question 16 relating to the gasification stack and odour stack.	21/02/14

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Response to Schedule 5 notice (sent on 30/01/14)	Response to questions 8 and 9 correcting errors in the list of wastes.	21/02/14
Memo 'Justification of Gasification Technology' clarifying response to the Schedule 5 notices	Sections 2 and 3 describing the proposed staged gasification system, including figure 1 (staged gasification design).	29/05/14
Memo 'EP Variation Clarifications'	Section 3 relating to ash and APC residues. Section 4 relating to road sweepings bulking facility.	16/05/14
Further information: Operating technique clarifications	Response to question 2a relating to prevention of uncontrolled ingress of air. Response to question 2c relating to urea solution storage.	20/05/14
Further information: AD process diagram	Revised AD process diagram and additional information about the waste dissolvers.	06/06/14
Further information: revised site plan	Revised site plan showing the installation boundary and the revised emission points.	06/06/14
Email of further information: waste acceptance	Confirmation of waste acceptance for gasification during gasifier downtime.	10/07/14
Email of additional information	Section 2, A1, only paragraph 3 relating to the removal of waste from the bunker on a first in, first out principle.	16/10/14
Additional information	Clarification dated 10/10/14 relating to the removal of the wheel wash and replacement with a manual wash down.	16/10/14

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC1	The operator shall submit a written summary report to the Environment Agency for approval 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) comply 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 commissioning. Full summary evidence compliance report to be submitted within 18 months of commissioning.
IC2	The operator shall submit a written proposal to the Environment Agency to carry out tests to determine the size distribution of the particulate matter in the exhaust gas emissions to air from emission point A1 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 submit to the Environment Agency a report on the results.	Within 6 months of the completion of commissioning.

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC3	The operator shall submit a written report to the Environment Agency for approval, on the commissioning of activities A1 to A5. 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 Installation against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions.	Within 4 months of the completion of commissioning.
IC4	The operator shall carry out checks to verify the residence time, minimum temperature and oxygen content of the exhaust gases in the combustion zone whilst operating under the anticipated most unfavourable operating conditions. The results shall be submitted in writing to the Environment Agency for approval.	Within 4 months of the completion of commissioning.
IC5	The operator shall submit a written report to the Environment Agency for approval, describing the performance and optimisation of the Selective Non Catalytic and Catalytic Reduction (SNCR and SCR) systems to minimise oxides of nitrogen (NOx) emissions within the emission limit values described in this permit with the minimisation of ammonia and nitrous oxide emissions. The report shall include an assessment of the level of NOx and N_2O emissions that can be achieved under optimum operating conditions. The report shall also provide details of the optimisation (including dosing rates) for the control of acid gases and dioxins.	Within 4 months of the completion of commissioning.
IC6	The operator shall carry out an assessment of the impact of emissions to air of the following metals subject to emission limit values: cadmium, arsenic and nickel. A report on the assessment shall be made to the Environment Agency for approval. 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 of each metal 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.

Table S1.4 Pre-operational measures	
Reference	**Pre-operational measures**
PO1	Prior to the commencement of commissioning of activity A1, the operator shall send a report to the Environment Agency for approval which shall contain a comprehensive review of the options available for utilising the heat generated by the waste incineration process in order to ensure that it is recovered as far as practicable. The review shall detail any identified proposals for improving the recovery and utilisation of waste heat and shall provide a timetable for their implementation.
PO2	Prior to the commencement of commissioning of activity A1, the operator shall submit to the Environment Agency for approval a protocol for the sampling and testing of incinerator bottom ash, boiler ash and APC residues for the purposes of assessing its hazard status. Sampling and testing shall be carried out in accordance with the protocol as approved.
PO3	Prior to the commencement of commissioning of activities A1 to A5, the operator shall send a summary of the revised site Accident Management Plan to the Environment Agency for approval, and make available for inspection all documents and procedures which form part of the Plan. The Plan shall be developed in line with the requirements set out in Section 1 of How to comply with your environmental permit (EPR 1.00).
PO4	Prior to the commencement of commissioning of activities A1 to A5, the operator shall notify the Environment Agency of the completion of the HAZOP study.

Table S1.4 Pre-operational measures	
Reference	**Pre-operational measures**
PO5	After completion of furnace design and at least three calendar months before any furnace operation, the operator shall submit a written report of the details of the computational fluid dynamic (CFD) modelling to the Agency for approval. The report shall demonstrate whether the design combustion conditions comply with the residence time and temperature requirements as defined by Chapter IV of the Industrial Emissions Directive.
PO6	After completion of the detailed furnace design and at least 3 months before furnace operation, the operator shall submit a written report on the proposed techniques to validate combustion conditions during the commissioning of the furnace to the Environment Agency for approval. The report shall demonstrate that the indicative BAT "operational stage", "qualifying zone" and "test conditions" requirements, given in section 2.5 of the Incineration of Waste Sector Guidance note EPR 5.01, will be applied.
PO7	After any land remediation work has been completed on the site, and prior to the commencement of commissioning of activities A1 to A5, the operator shall submit a report on the baseline conditions of soil and groundwater at the installation to the Environment Agency for approval. The report shall contain the information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definitive cessation of activities provided for in Article 22(3) of the IED. The report shall contain information, supplementary to that already provided in application Site Condition Report, needed to meet the information requirements of Article 22(2) of the IED, including a revised gas risk assessment report, incorporating the monitoring of gas levels in boreholes when the ambient air pressure is less than 1000 mbar, and confirming whether the conclusion of the original gas risk assessment report (dated 28 Feb 2011) is still correct.
PO8	Prior to the commencement of commissioning of activities A1 to A5, 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.
PO9	On completion of the final design of activities A1 to A5, the operator shall, revise the Noise Assessment submitted as part of the Environmental Permit Application, and re-submit the assessment to the Environment Agency for approval. The revised assessment shall include the details of the measures, designed to eliminate any acoustic features that could increase the likelihood of complaint, sufficiently to justify not applying the BS:4142 noise (tonal) correction factors.
PO10	Prior to the commencement of commissioning of activities A1 to A5, the operator shall submit a written report to the Environment Agency detailing the revised waste acceptance procedure to be used at the site. The waste acceptance procedure shall include the process and systems by which wastes unsuitable for incineration at the site will be controlled and confirm the arrangements for the handling of wastes when the gasification plant is not operating. The procedure shall be implemented in accordance with the written approval from the Environment Agency.
PO11	Prior to the commencement of commissioning of activity A1, the operator shall submit a written report to the Environment Agency detailing the controlled shut down procedure required by condition 2.3.6. The procedure shall ensure that the gasifier is shut down as quickly as possible. The procedure shall be implemented in accordance with the written approval from the Environment Agency.
PO12	Prior to the commencement of commissioning of activities A1 to A5, the operator shall submit an odour management plan to the Environment Agency for written approval. Once approved, the operator shall undertake any required measures, as submitted in the plan.
PO13	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.

Table S1.4 Pre-operational measures	
Reference	**Pre-operational measures**
PO14	At least 8 weeks (or such other date as agreed in writing by the Environment Agency) prior to the commissioning of activities A1 to A5, the operator shall submit the final site drainage plan to the Environment Agency for approval. The site drainage plan shall include the location of the proposed secondary containment for all above-ground tanks at the facility.
PO15	Following the completion of PO14, (at least 4 weeks or such other date as agreed in writing by the Environment Agency) prior to the commissioning of activities A1 to A5, the operator shall ensure that a review of the design, method of construction and integrity of all secondary containment surrounding all above-ground tanks at the Installation is carried out by a qualified structural engineer. The review shall compare the constructed secondary containment against the standards set out in Section 2.2.5 of the Sector Guidance Note IPPC S5.06 – *Guidance for the Recovery and Disposal of Hazardous and Non Hazardous Waste* and CIRIA Report C736 – *Containment systems for the prevention of pollution: Secondary, tertiary and other measures for industrial and commercial premises*. The review shall include: • the physical condition of the secondary containment, • their suitability for providing containment when subjected to the dynamic and static loads caused by catastrophic tank failure, • any work required to ensure compliance with the standards set out in CIRIA Report C736, and • a preventative maintenance and inspection regime. A written report of the review shall be submitted to the Environment Agency detailing the reviews findings and recommendations. Remedial action shall be taken to ensure that the secondary containment meets the standards set out in the above technical guidance documents and implement the maintenance and inspection regime. No site operations shall commence or waste accepted at the Installation unless the Environment Agency has given prior written permission under this condition.
PO16	Prior to the commencement of commissioning of activities A1 to A5, the operator shall submit a written report to the Environment Agency detailing the operational procedures during periods of planned shutdown or routine maintenance. The review shall include: • a summary of when shut-down periods are expected; • the procedures to be followed in the run up to a period of planned shut down; and • what will happen to the waste streams during these periods. The operator shall make available for inspection all documents which form part of the procedure. The procedure shall be implemented in accordance with the 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**
Fuel Oil	< 0.1% sulphur content

Table S2.2 Permitted waste types and quantities for gasification plant	
Maximum quantity	The quantity of wastes accepted for gasification shall not exceed 55,460 tonnes a year.
Waste code	**Description**
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 01	**Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 07	wastes from forestry
02 01 09	agrochemical waste other than those mentioned in 02 01 08
02 03	**wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation**
02 03 04	materials unsuitable for consumption or processing
02 05	**Wastes from the dairy products industry**
02 05 01	materials unsuitable for consumption or processing
02 06	**wastes from the baking and confectionery industry**
02 06 01	materials unsuitable for consumption or processing
02 06 02	wastes from preserving agents
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 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**
07 02	**wastes from the MFSU of plastics, synthetic rubber and man-made fibres**
07 02 13	waste plastic
15	**WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED**

Table S2.2 Permitted waste types and quantities for gasification plant	
Maximum quantity	The quantity of wastes accepted for gasification shall not exceed 55,460 tonnes a year.
Waste code	**Description**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 09	textile packaging
15 02	**absorbents, filter materials, wiping cloths and protective clothing**
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
16	**WASTES NOT OTHERWISE SPECIFIED IN THE LIST**
16 01	**End-of-life vehicles and their components**
16 01 19	plastic
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 02	**wood, glass and plastic**
17 02 01	wood
17 02 03	plastic
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 02	**wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)**
19 02 03	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 wastes from aerobic treatment of solid wastes
19 05	**Wastes from aerobic treatment of waste**
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 wastes from anaerobic treatment of waste
19 06	**Wastes from anaerobic treatment of waste**
19 06 04	digestate from anaerobic treatment of municipal waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletizing) not otherwise specified
19 12	**Waste from the mechanical treatment of waste(e.g. sorting crushing, compacting, palletising) not otherwise specified)**
19 12 01	paper and cardboard
19 12 04	plastic and rubber
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles

Table S2.2 Permitted waste types and quantities for gasification plant	
Maximum quantity	The quantity of wastes accepted for gasification shall not exceed 55,460 tonnes a year.
Waste code	**Description**
19 12 10	combustible waste (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
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 01	paper and cardboard
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 25	edible oil and fat
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 30	detergents other than those mentioned in 20 01 29
20 01 32	Medicines other than those mentioned in 20 01 31
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 41	wastes from chimney sweeping
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste
20 02 03	other non-biodegradable wastes
20 03	**other municipal wastes**
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 04	septic tank sludge
20 03 06	waste from sewage cleaning
20 03 07	bulky waste

Table S2.3 Permitted waste types and quantities for Anaerobic Digestion plant	
Maximum quantity	The quantity of wastes accepted for treatment by Anaerobic Digestion shall not exceed 40,000 tonnes a year.
Waste code	**Description**
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 01	sludges from washing and cleaning − food processing waste, food washing waste
02 01 02	animal tissue waste − Category 3 animal by-products (ABP) including blood, animal flesh, fish processing waste, fish carcasses, poultry waste − Category 2 ABP – paunch contents

Table S2.3 Permitted waste types and quantities for Anaerobic Digestion plant	
Maximum quantity	The quantity of wastes accepted for treatment by Anaerobic Digestion shall not exceed 40,000 tonnes a year.
Waste code	**Description**
02 01 03	plant tissue waste - husks, cereal dust, waste animal feeds
02 01 06	animal faeces, urine, manure including spoiled straw
02 01 07	wastes from forestry
02 01 99	residues from commercial mushroom cultivation
02 02	**wastes from the preparation and processing of meat, fish and other foods of animal origin**
02 02 01	sludges from washing and cleaning − process water, − food washing waste
02 02 02	animal tissue waste − Category 3 ABP including blood, animal flesh, fish processing waste, fish carcasses, poultry waste
02 02 03	materials unsuitable for consumption or processing − coffee, food processing waste, jam, kitchen waste, fruit, vegetable oil, tobacco, tea, vegetable waste − waste fat from processing of meat or fish
02 02 04	sludges from on-site effluent treatment
02 02 99	non specified* − sludges from gelatine production − animal gut contents
02 03	**wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation**
02 03 02	sludges from washing, cleaning peeling, centrifuging and separation − coffee, mushroom compost, food processing waste, food washing waste, tobacco
02 03 04	biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances)
02 03 05	effluent from the processes referred to in sources of waste
02 03 99	non specified* − sludge from production of edible fats and oils − seasoning residues, molasses residues − residues from production of potato, corn or rice starch
02 04	**wastes from sugar processing**
02 04 03	sludges from on-site effluent treatment − biological sludge
02 04 99	other biodegradable wastes
02 05	**wastes from the dairy products industry**
02 05 01	biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances) − solid and liquid dairy products, milk, food processing wastes, yoghurt, whey
02 05 02	sludges from on-site effluent treatment
02 06	**wastes from the baking and confectionery industry**
02 06 01	biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances) - food condemned, food processing wastes, biscuits, chocolate, yeast, bread, bakery wastes
02 06 03	sludges from on-site effluent treatment
02 07	**wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)**
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials− brewing waste, food processing waste, fermentation waste
02 07 02	wastes from spirits distillation − spent grains, fruit and potato pulp − sludge from distilleries

Table S2.3 Permitted waste types and quantities for Anaerobic Digestion plant	
Maximum quantity	The quantity of wastes accepted for treatment by Anaerobic Digestion shall not exceed 40,000 tonnes a year.
Waste code	**Description**
02 07 04	biodegradable materials unsuitable for consumption or processing (other than those containing dangerous substances) - brewing waste, food processing waste, fermentation waste, beer, alcoholic drinks, fruit juice
02 07 99	spent grains, hops and whisky filter sheets/ cloths.
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 02	green liquor sludge − paper sludge, green liquor
03 03 08	wastes from sorting of paper and cardboard destined for recycling − cardboard, newspaper, tissues, paper
03 03 10	fibre rejects and sludges − paper pulp (de-inked only), paper fibre
04	**WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES**
04 01	**Wastes from the leather and fur industry**
04 01 01	fleshings and lime split wastes
04 01 05	tanning liquor free of chromium
04 01 07	sludges not containing chromium
04 02	waste from the textile industry
04 02 10	organic matter from natural products, e.g. grease, wax
07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**
07 02	**wastes from the manufacture, formulation, supply and use of plastics, synthetic rubber and man-made fibres**
07 02 13	waste plastic - must conform to BS EN 13432
19	**WASTE 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 05	**wastes from the aerobic treatment of solid wastes**
19 05 01	non composted fraction of municipal and similar wastes
19 05 02	non composted fraction of animal and vegetable wastes
19 05 03	off-specification compost from source segregated biodegradable waste
19 06	**waste from anaerobic treatment of waste**
19 06 03	liquor from anaerobic treatment of municipal waste
19 06 04	digestate from anaerobic treatment of source segregated biodegradable waste
19 06 05	liquor from anaerobic treatment of animal and vegetable waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 01	**municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01 08	biodegradable kitchen and canteen waste
20 01 25	edible oil and fat

Table S2.3 Permitted waste types and quantities for Anaerobic Digestion plant	
Maximum quantity	The quantity of wastes accepted for treatment by Anaerobic Digestion shall not exceed 40,000 tonnes a year.
Waste code	**Description**
20 01 38	wood (where no non-biodegradable coating or preserving substance present)
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste − animal faeces, manure, garden waste, green waste, horticultural waste, plant tissue, parks and garden waste, hedge and tree trimmings, grass cuttings and leafy materials
20 03	**other municipal wastes**
20 03 01	mixed municipal waste − separately collected biowastes
20 03 02	wastes from markets - markets − allowed only if source segregated biodegradable fractions e.g. plant material, fruit and vegetables.

Table S2.4 Permitted waste types and quantities for Recyclables Bulking Facility and Community Recycling Centre	
Maximum quantity	The quantity of wastes accepted at the Recyclables Bulking Facility and Community Recycling Centre shall not exceed 250,000 tonnes a year.
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 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
09	**WASTES FROM THE PHOTOGRAPHIC INDUSTRY**
09 01	**Wastes from the photographic industry**
09 01 11*	single-use cameras containing batteries included in 16 06 01, 16 06 02 or 16 06 03
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
13	**OIL WASTES AND WASTES OF LIQUID FUELS**
13 02	**Waste engine, gear and lubricating oils**
13 02 04*	mineral-based non chlorinated engine, gear and lubricating oils
13 02 05*	mineral-based non chlorinated engine, gear and lubricating oils
13 02 06*	synthetic engine, gear and lubricating oils
13 02 07*	readily biodegradable engine, gear and lubricating oils
13 02 08*	other engine, gear and lubricating oil
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 06	mixed packaging (packaging waste associated with incoming weee only)
16	**WASTES NOT OTHERWISE SPECIFIED IN THE LIST**

Table S2.4 Permitted waste types and quantities for Recyclables Bulking Facility and Community Recycling Centre	
Maximum quantity	The quantity of wastes accepted at the Recyclables Bulking Facility and Community Recycling Centre shall not exceed 250,000 tonnes a year.
Waste code	**Description**
16 01	**End-of-life vehicles from different means of transport [including off-road machinery] and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)**
16 01 03	end-of-life-tyres
16 01 07*	oil filters
16 02	**Wastes from electrical and electronic equipment**
16 02 09*	transformers and capacitors containing pcbs
16 02 10*	discarded equipment capacitors containing or contaminated by pcbs other than those mentioned in 16 02 09
16 02 11*	discarded equipment capacitors containing chlorofluorocarbons, hcfc, hfc
16 02 12*	discarded equipment capacitors 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
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15
16 05	**gases in pressure containers and discarded chemicals**
16 05 05	gases in pressure containers other than those mentioned in 16 05 04
16 06	**Batteries and accumulators**
16 06 01*	lead acid
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
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 01	**Concrete, bricks, tiles and ceramics**
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	**Wood, glass and plastic**
17 02 01	wood
17 02 02	glass
17 02 03	plastic
17 04	**Metals (including their alloys)**
17 04 01	copper, bronze, brass
17 04 02	aluminium

Table S2.4 Permitted waste types and quantities for Recyclables Bulking Facility and Community Recycling Centre	
Maximum quantity	The quantity of wastes accepted at the Recyclables Bulking Facility and Community Recycling Centre shall not exceed 250,000 tonnes a year.
Waste code	**Description**
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
17 05	**Soil (including excavated soil from contaminated sites), stones and dredging spoil**
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
17 06	**Insulation materials and asbestos-containing construction materials**
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 06 05*	construction materials containing asbestos
17 08	**Gypsum-based construction material**
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
17 09	**Other construction and demolition wastes**
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION/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
19 12 07	wood other than that mentioned in 19 12 06
19 12 09	minerals (for example sand, stones)
19 12 12	other wastes (including mixture of materials) from mechanical treatment of waste other than those mentioned in 19 12 11
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 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes

Table S2.4 Permitted waste types and quantities for Recyclables Bulking Facility and Community Recycling Centre	
Maximum quantity	The quantity of wastes accepted at the Recyclables Bulking Facility and Community Recycling Centre shall not exceed 250,000 tonnes a year.
Waste code	**Description**
20 01 11	textiles
20 01 13*	solvent
20 01 14*	acids
20 01 15*	alkalines
20 01 17*	photochemicals
20 01 19*	pesticides
20 01 21*	fluorescent tubes and other mercury containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 25	edible oil and fat
20 01 26*	oil and fat other than those mentioned in 20 01 25
20 01 27*	paint, inks, adhesives and resins containing dangerous substances
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 29*	detergents containing dangerous substances
20 01 30	detergents other than those mentioned in 20 01 29
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 37*	wood containing dangerous substances
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 01 41	wastes from chimney sweeping
20 02	**Garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
20 03	**Other municipal wastes**
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 07	bulky waste

Table S2.5 Permitted waste types and quantities for Road Sweeping Bulking Facility	
Maximum quantity	The quantity of wastes accepted at the Road Sweeping Bulking Facility shall not exceed 2,660 tonnes a year.
Waste code	**Description**
20 03	**Other municipal wastes**
20 03 03	street-cleaning residues

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 Location marked on site plan in schedule 7	Particulate matter	Gasification plant stack	30 mg/m^3	½-hr average	Continuous measurement	BS EN 14181
A1 Location marked on site plan in schedule 7	Particulate matter	Gasification plant stack	10 mg/m^3	daily average	Continuous measurement	BS EN 14181
A1 Location marked on site plan in schedule 7	Total Organic Carbon (TOC)	Gasification plant stack	20 mg/m^3	½-hr average	Continuous measurement	BS EN 14181
A1 Location marked on site plan in schedule 7	Total Organic Carbon (TOC)	Gasification plant stack	10 mg/m^3	daily average	Continuous measurement	BS EN 14181
A1 Location marked on site plan in schedule 7	Hydrogen chloride	Gasification plant stack	60 mg/m^3	½-hr average	Continuous measurement	BS EN 14181
A1 Location marked on site plan in schedule 7	Hydrogen chloride	Gasification plant stack	10 mg/m^3	daily average	Continuous measurement	BS EN 14181
A1 Location marked on site plan in schedule 7	Hydrogen fluoride	Gasification plant stack	2 mg/m^3	periodic over minimum 1-hour period	Quarterly in first year then Bi-annual	BS ISO 15713
A1 Location marked on site plan in schedule 7	Carbon monoxide	Gasification plant stack	150 mg/m^3	95% of all 10-minute averages in any 24-hour period	Continuous measurement	BS EN 14181
A1 Location marked on site plan in schedule 7	Carbon monoxide	Gasification plant stack	50 mg/m^3	daily average	Continuous measurement	BS EN 14181

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 Location marked on site plan in schedule 7	Sulphur dioxide	Gasification plant stack	200 mg/m^3	½-hr average	Continuous measurement	BS EN 14181
A1 Location marked on site plan in schedule 7	Sulphur dioxide	Gasification plant stack	50 mg/m^3	daily average	Continuous measurement	BS EN 14181
A1 Location marked on site plan in schedule 7	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	Gasification plant stack	400 mg/m^3	½-hr average	Continuous measurement	BS EN 14181
A1 Location marked on site plan in schedule 7	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	Gasification plant stack	100 mg/m^3	daily average	Continuous measurement	BS EN 14181
A1 Location marked on site plan in schedule 7	Cadmium & thallium and their compounds (total)	Gasification plant stack	0.05 mg/m^3	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 14385
A1 Location marked on site plan in schedule 7	Mercury and its compounds	Gasification plant stack	0.05 mg/m^3	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year then Bi-annual	BS EN 13211
A1 Location marked on site plan in schedule 7	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	Gasification plant stack	0.5 mg/m^3	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year then Bi-annual	BS EN 14385
A1 Location marked on site plan in schedule 7	Ammonia (NH_3)	Gasification plant stack	-	daily average	Continuous measurement.	BS EN 14181
A1 Location marked on site plan in schedule 7	Nitrous oxide (N_2O)	Gasification plant stack	-	periodic over minimum 1-hour period	For periodic measurement, quarterly in the first year of operation, then bi-annual	BS EN ISO 21258
A1 Location marked on site plan in schedule 7	Dioxins / furans (I-TEQ)	Gasification plant stack	0.1 ng/m^3	periodic over minimum 6 hours, maximum 8 hour period	Monthly for the first 6 months, then Quarterly for the second 6 months then Bi-annual	BS EN 1948 Parts 1, 2 and 3

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 Location marked on site plan in schedule 7	Dioxins / furans (WHO-TEQ Humans / Mammals)	Gasification plant stack	-	periodic over minimum 6 hours, maximum 8 hour period	Monthly for the first 6 months, then Quarterly for the second 6 months then Bi-annual	BS EN 1948 Parts 1, 2 and 3
A1 Location marked on site plan in schedule 7	Dioxins / furans (WHO-TEQ Fish)	Gasification plant stack	-	periodic over minimum 6 hours, maximum 8 hour period	Monthly for the first 6 months, then Quarterly for the second 6 months then Bi-annual	BS EN 1948 Parts 1, 2 and 3
A1 Location marked on site plan in schedule 7	Dioxins / furans (WHO-TEQ Birds)	Gasification plant stack	-	periodic over minimum 6 hours, maximum 8 hour period	Monthly for the first 6 months, then Quarterly for the second 6 months then Bi-annual	BS EN 1948 Parts 1, 2 and 3
A1 Location marked on site plan in schedule 7	Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	Gasification plant stack	-	periodic over minimum 6 hours, maximum 8 hour period	Monthly for the first 6 months, then Quarterly for the second 6 months then Bi-annual	BS EN/TS 1948-4
A1 Location marked on site plan in schedule 7	Dioxin-like PCBs (WHO-TEQ Fish)	Gasification plant stack	-	periodic over minimum 6 hours, maximum 8 hour period	Monthly for the first 6 months, then Quarterly for the second 6 months then Bi-annual	BS EN/TS 1948-4
A1 Location marked on site plan in schedule 7	Dioxin-like PCBs (WHO-TEQ Birds)	Gasification plant stack	-	periodic over minimum 6 hours, maximum 8 hour period	Monthly for the first 6 months, then Quarterly for the second 6 months then Bi-annual	BS EN/TS 1948-4
A1 Location marked on site plan in schedule 7	Specific individual poly-cyclic aromatic hydrocarbons (PAHs), as specified in Schedule 6.	Gasification plant stack	-	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year then Bi-annual	Procedure shall use BS ISO 11338-1 and BS-ISO 11338-2
A4 & A5 Location marked on site plan in schedule 7	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	CHP Gas Engines' stacks	300 mg/m^3	periodic over minimum 4 hour period	Quarterly in first year then annual	BS EN 14792
A4 & A5 Location marked on site plan in schedule 7	Sulphur Dioxide	CHP Gas Engines' stacks	350 mg/m^3	periodic over minimum 4 hour period	Quarterly in first year then annual	BS EN 14791

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A4 & A5 Location marked on site plan in schedule 7	Carbon Monoxide	CHP Gas Engines' stacks	1400 mg/m^3	periodic over minimum 4 hour period	Quarterly in first year then annual	BS EN 15058
A4 & A5 Location marked on site plan in schedule 7	Total volatile organic compounds (VOCs)	CHP Gas Engines' stacks	1000 mg/m^3	Periodic. Hourly average	Quarterly in first year then annual	BE EN 12619:1999 or BS EN 13526:2002 depending on concentration
A6 Location marked on site plan in schedule 7	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	Flare stack	150 mg/m^3	periodic over minimum 4 hour period	Annual monitoring required only if flare operates from more than 876 hours in the year	BS EN 14792
A6 Location marked on site plan in schedule 7	Sulphur Dioxide	Flare stack	395 mg/m^3	periodic over minimum 4 hour period	Annual monitoring required only if flare operates from more than 876 hours in the year	BS EN 14791
A6 Location marked on site plan in schedule 7	Carbon Monoxide	Flare stack	50 mg/m^3	periodic over minimum 4 hour period	Annual monitoring required only if flare operates from more than 876 hours in the year	BS EN 15058
A6 Location marked on site plan in schedule 7	Total volatile organic compounds (VOCs)	Flare stack	10 mg/m^3	Periodic. Hourly average	Annual monitoring required only if flare operates from more than 876 hours in the year	BE EN 12619:1999 or BS EN 13526:2002 depending on concentration
A7 Location marked on site plan in schedule 7	No Parameter Set	Odour Control system Stack	-	-	-	Permanent sampling access not required
Emergency Pressure relief valve	Biogas	Biogas Holder	-	-	-	Permanent sampling access not required
Vents on storage tanks and silos	No Parameter Set	Storage tanks and silos	-	-	-	Permanent sampling access not required

Table S3.1(a) Point source emissions to air during abnormal operation of incineration plant – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 Location marked on site plan in schedule 7	Particulate matter	Gasification plant stack	150 mg/m^3	½-hr average	Continuous measurement	BS EN 14181
A1 Location marked on site plan in schedule 7	Total Organic Carbon (TOC)	Gasification plant stack	20 mg/m^3	½-hr average	Continuous measurement	BS EN 14181
A1 Location marked on site plan in schedule 7	Carbon monoxide	Gasification plant stack	100 mg/m^3	½-hr average	Continuous measurement	BS EN 14181

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W1 Soakaway, marked on site plan in schedule 7	No parameters set	Surface water	No limit set			

Table S3.3 Point source emissions to sewer – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
S1 marked on site plan in schedule 7	No parameters set	Liquor from anaerobic digestion plant and other waste waters	No limit set			

Table S3.4 Process monitoring requirements				
Location or description of point of measurement	**Parameter**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
Location close to the gasification combustion zone inner wall or as identified and justified in Application	Temperature (° C)	Continuous	Traceable to national standards	As agreed in writing with the Agency
A1 Gasification plant stack. Location marked on site plan in schedule 7	Exhaust gas temperature	Continuous	Traceable to national standards	As agreed in writing with the Agency
A1 Gasification plant stack. Location marked on site plan in schedule 7	Exhaust gas pressure	Continuous	Traceable to national standards	As agreed in writing with the Agency
A1 Gasification plant stack. Location marked on site plan in schedule 7	Exhaust gas oxygen content	Continuous	BS EN 15267-3 BS EN 14181	
A1 Gasification plant stack. Location marked on site plan in schedule 7	Exhaust gas water vapour content	Continuous	BS EN 15267-3 BS EN 14181	Unless gas is dried before analysis of emissions

Table S3.5 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	TOC	<3%	Monthly in the first year of operation then Quarterly	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	Sampling and analysis as per 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	Sampling and analysis as per 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	Sampling and analysis as per 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, Cobalt, Vanadium, Zinc) soluble fractions	-	Before use of a new disposal or recycling route	Sampling and analysis as per TGN M4 Guidelines for Ash Sampling and Analysis	-

Table S3.5 Residue quality					
Emission point reference or source or description of point of measurement	**Parameter**	**Limit**	**Monitoring frequency**	**Monitoring standard or method ***	**Other specifications**
Boiler 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	Sampling and analysis as per TGN M4 Guidelines for Ash Sampling and Analysis	-
Boiler 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	Sampling and analysis as per TGN M4 Guidelines for Ash Sampling 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.

Table S4.1 Reporting of monitoring data

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air from Gasification Plant Parameters as required by condition 3.5.1	A1	Continuous: Quarterly Periodic: Quarterly for first year, then bi-annual	1 Jan, 1 Apr, 1 Jul and 1 Oct 1 Jan, 1 Apr, 1 Jul and 1 Oct. Then 1 Jan and 1 Jul
Emissions to air from CHP Gas Engines Parameters as required by condition 3.5.1	A4, A5	Periodic: Quarterly for first year, then annual	1 Jan, 1 Apr, 1 Jul and 1 Oct. Then 1 Jan
Emissions to air from Flare Parameters as required by condition 3.5.1	A6	Annual (if required)	1 Jan
TOC 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	

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
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	
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	Boiler 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	Boiler Ash	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

Table S4.2: Annual production/treatment
Parameter
Total Municipal Waste Incinerated
Total Commercial and Industrial Waste Incinerated
Total Waste Digested
Total Electrical energy produced
Total Thermal energy exported e.g. steam
Total Electrical energy exported
Total Electrical energy used in the facility
Total Waste heat utilised by the facility

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Electrical energy exported, imported and used at the facility, including separate accounting for the gasification installation and AD/CHP installation	Annually	kWh / tonne of waste
Fuel oil consumption	Annually	kg / tonne of waste incinerated
Mass of Bottom Ash produced	Annually	kg / tonne of waste incinerated
Mass of APC residues produced	Annually	kg / tonne of waste incinerated
Mass of Boiler Ash produced	Annually	kg / tonne of waste incinerated
Urea consumption	Annually	kg / tonne of waste incinerated
Activated Carbon consumption	Annually	kg / tonne of waste incinerated
Lime consumption	Annually	kg / tonne of waste incinerated
Water consumption at the facility, including separate accounting for the gasification installation and AD/CHP installation	Annually	kg / tonne of waste
Periods of abnormal operation	Quarterly	Number of occasions and cumulative hours for current calendar year for each line.
Periods of flare stack operation	Quarterly	Number of occasions and cumulative hours for current calendar year.

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Air	Forms Air 1- 8 "Gasification Plant stack" or other form as agreed in writing by the Environment Agency	29/10/14
Air	Form air 9 "CHP Gas Engine stacks" or other form as agreed in writing by the Environment Agency	29/10/14
Air	Form air 10 "Flare stack" or other form as agreed in writing by the Environment Agency	29/10/14
Water and raw material usage and Ash Production	Form WU/RM/AP1 or other form as agreed in writing by the Environment Agency	29/10/14
Energy usage	Form Energy 1 or other form as agreed in writing by the Environment Agency	29/10/14
Ash Quality	Forms Residue 1 & 2 or other form as agreed in writing by the Environment Agency	29/10/14
Other performance indicators	Form Performance 1 or other form as agreed in writing by the Environment Agency	29/10/14

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	EPR/VP3997NK
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	
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	
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 other than continuous emission monitors for releases to air of particulates, TOC and/or CO, 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.

“Annex I” means Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“Annex II” means Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“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.

“BATRRT - 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).

“background concentration” means such concentration of that substance as is present in:

- for emissions to surface water, the surface water quality up-gradient of the site; or
- for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.

“bi-annual” means twice per year with at least five months between tests.

“bottom ash” means the ash residues from the bottom of the gasifier.

“CEM” means Continuous Emission Monitor.

“CEN” means Commité Européen de Normalisation.

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

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

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

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

“disposal” means any of the operations provided for in Annex IIA 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 or background concentration limit**.**

“emissions to land” includes emissions to groundwater.

“End-of-Life Vehicles Directive” means Directive 2000/53/EC of the European Parliament and Council of 18 September 2000 on end-of-life vehicles.

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

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

“hazardous waste” has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 No.894, the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138), the List of Wastes (England) Regulations 2005 No.895 and the List of Wastes (Wales) Regulations 2005 No. 1820 (W.148).

“hazardous property” has the meaning given in Schedule 3 of the Hazardous Waste (England and Wales) Regulations 2005 No.894 and the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138).

“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.

“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, Dibenzo[ah]anthracene, Dibenzo[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.

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

“quarterly” for reporting/sampling means after/during each 3 month period, January to March; April to June; July to September and October to December and, when sampling, with at least 2 months between each sampling date.

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

“R” means a recovery operation 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 as described in the application 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 to initiate steady-state conditions as described in the application 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. In respect of Bottom Ash, this means the total carbon content of all organic species present in the ash (excluding carbon in elemental form).

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

“Waste Framework Directive (WFD)” means Directive 2008/98/EC of the European Parliament and the Council.

“WEEE” means waste electrical and electronic equipment.

“WEEE Directive” means Directive 2002/96/EC of the European Parliament and of the Council of 27th January 2003 on waste electrical and electronic equipment (WEEE) as amended by Directive 2003/108/EC of the European Parliament and of the Council of 8th December 2003 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:

(a) in relation to emissions from the flare stack, 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; and/or

(b) 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.

(c) In relation to gases from gas engines, the concentration in dry air at a temperature of 273k, at a pressure of 101.3 kPa and with an oxygen content of 5% 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 (to be used for checking compliance with ELV), and all congeners less than the detection limit assumed to be at the detection limit as a maximum.

TEF schemes for dioxins and furans				
Congener	***I-TEF***	***WHO-TEF***		
	1990	**2005**	**1997/8**	
		Humans / Mammals	***Fish***	***Birds***
Dioxins				
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*
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*	*-*	*-*
Furans				
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***
Non-ortho PCBs			
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*
Mono-ortho PCBs			
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*

Schedule 7 - Site plan

END OF PERMIT

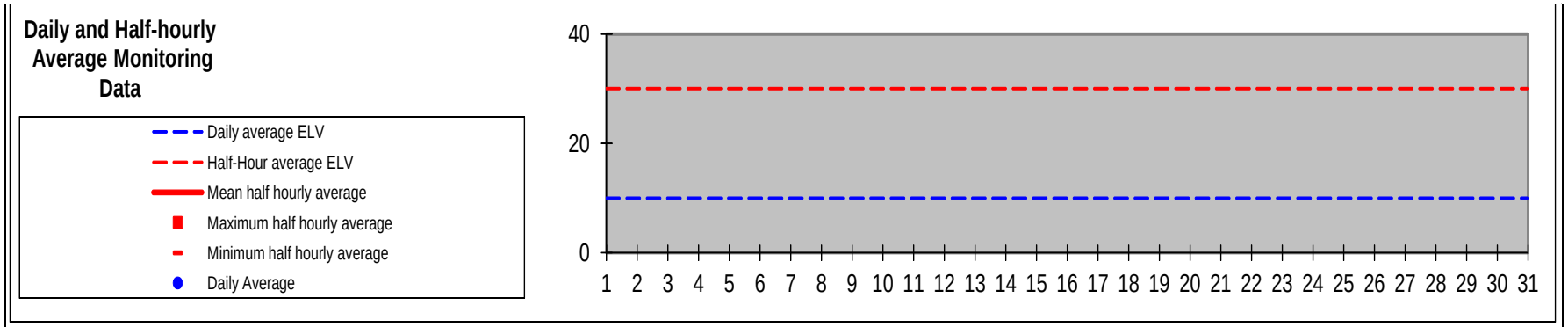
Permit Number: EPR/VP3997NK

Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park

Form Number: Air 1 Gasification Plant Stack – 29/10/14

Reporting of Continuously Monitored Emissions to Air for Particulates from Emission Point A__ for the month of MM, YYYY



	Monthly summary		Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Half-hourly average			Half-Hour average ELV	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	Monthly maximum	0	Maximum half hourly average																															
	Monthly mean	###	Mean half hourly average																															
	Monthly minimum	0	Minimum half hourly average																															
	Total invalid results	0	No. of invalid results																															
	Sum of exceedances	0	No. of exceedances of ELV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily average			Daily average ELV	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	Monthly maximum	0	Daily Average																															
	No. of invalid days	0	Value valid? (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Sum of exceedances	0	Value exceeds ELV (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

Signed …….. Date……..

(Authorised to sign as representative of Sita Surrey Limited)

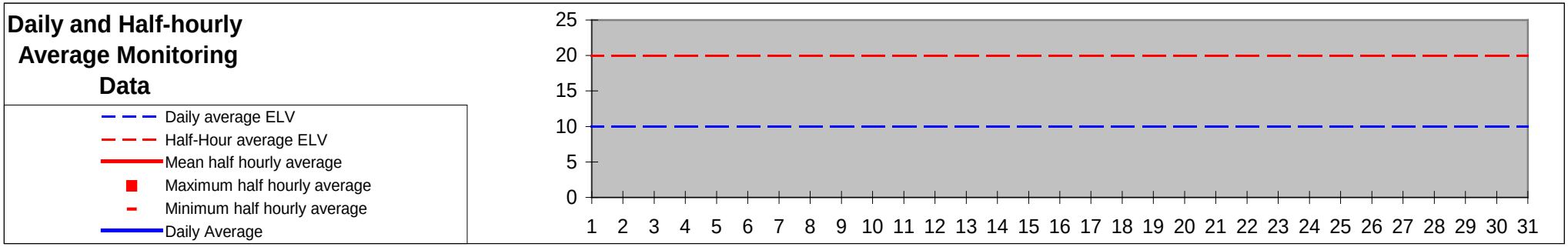
Permit Number: EPR/VP3997NK

Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park

Form Number: Air 2 Gasification Plant Stack – 29/11/14

Reporting of Continuously Monitored Emissions to Air for TOC from Emission Point A__ for the month of MM, YYYY



	Monthly summary		Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
			Half-Hour average ELV	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Half-hourly average	Monthly maximum	0	Maximum half hourly average																															
	Monthly mean	####	Mean half hourly average																															
	Monthly minimum	0	Minimum half hourly average																															
	Total invalid results	0	No. of invalid results																															
	Sum of exceedances	0	No. of exceedances of ELV																															
			Daily average ELV	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Daily average	Monthly maximum	0	Daily Average																															
	No. of invalid days	0	Value valid?																															
	Sum of exceedances	0	Value exceeds ELV (Y/N)																															

Signed ……. Date……..

(Authorised to sign as representative of Sita Surrey Limited)

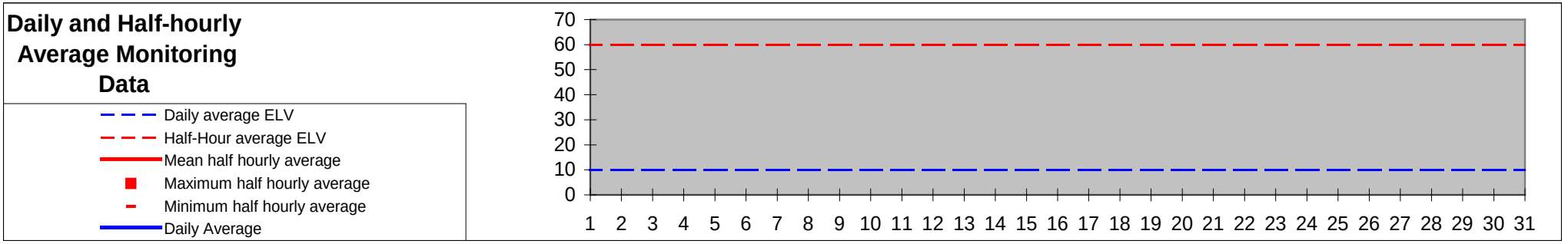
Permit Number: EPR/VP3997NK

Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park

Form Number: Air 3 Gasification Plant Stack – 29/10/14

Reporting of Continuously Monitored Emissions to Air for HCl from Emission Point A__ for the month of MM, YYYY



	Monthly summary		Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
			Half-Hour average ELV	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Half-hourly average	Monthly maximum	0	Maximum half hourly average																															
	Monthly mean	####	Mean half hourly average																															
	Monthly minimum	0	Minimum half hourly average																															
	Total invalid results	0	No. of invalid results																															
	Sum of exceedances	0	No. of exceedances of ELV																															
			Daily average ELV	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Daily average	Monthly maximum	0	Daily Average																															
	No. of invalid days	0	Value valid?																															
	Sum of exceedances	0	Value exceeds ELV (Y/N)																															

Signed …….. Date……..

(Authorised to sign as representative of SITA Surrey Limited)

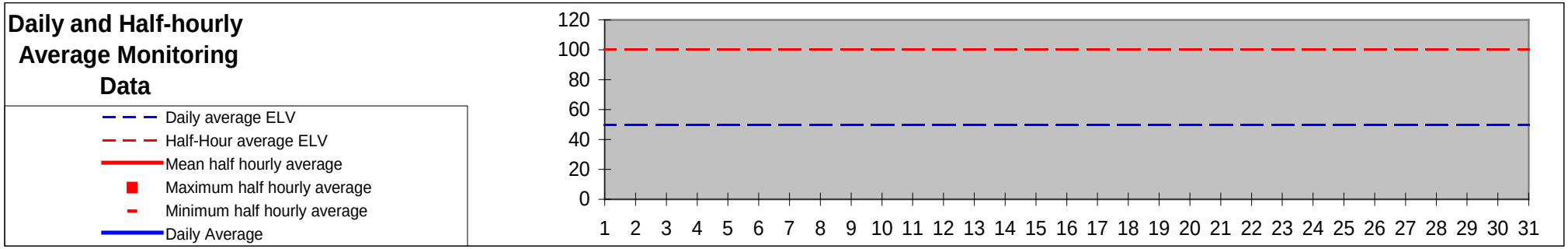
Permit Number: EPR/VP3997NK

Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park

Form Number: Air 4 Gasification Plant Stack – 29/11/14

Reporting of Continuously Monitored Emissions to Air for Carbon Monoxide from Emission Point A__ for the month of MM, YYYY



	Monthly summary		Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Half-hourly average			Half-Hour average ELV	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Monthly maximum	0	Maximum half hourly average																															
	Monthly mean	####	Mean half hourly average																															
	Monthly minimum	0	Minimum half hourly average																															
	Total invalid results	0	No. of invalid results																															
	Sum of exceedances	0	No. of exceedances of ELV																															
Daily average			Daily average ELV	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	Monthly maximum	0	Daily Average																															
	No. of invalid days	0	Value valid?																															
	Sum of exceedances	0	Value exceeds ELV (Y/N)																															

Signed …….. Date……..

(Authorised to sign as representative of SITA Surrey Limited)

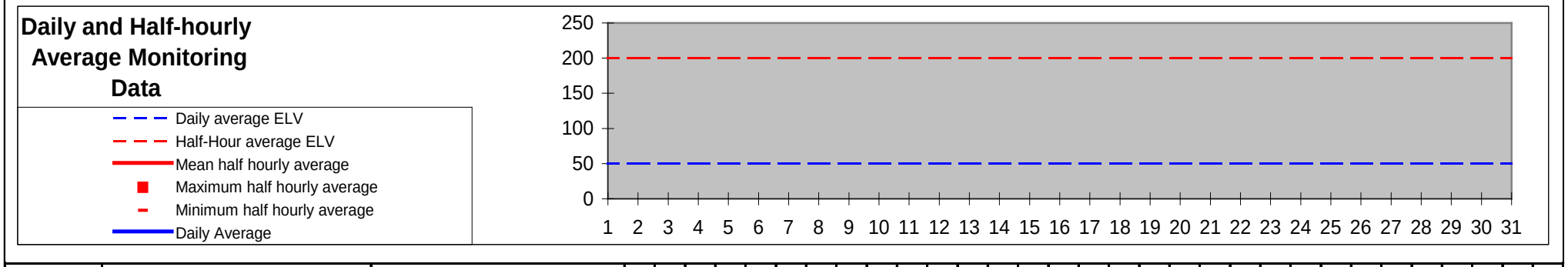
Permit Number: EPR/VP3997NK

Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park

Form Number: Air 5 Gasification Plant Stack – 29/10/14

Reporting of Continuously Monitored Emissions to Air for Sulphur Dioxide from Emission Point A__ for the month of MM, YYYY



	Monthly summary		Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
			Half-Hour average ELV	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
Half-hourly average	Monthly maximum	0	Maximum half hourly average																															
	Monthly mean	####	Mean half hourly average																															
	Monthly minimum	0	Minimum half hourly average																															
	Total invalid results	0	No. of invalid results																															
	Sum of exceedances	0	No. of exceedances of ELV																															
			Daily average ELV	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Daily average	Monthly maximum	0	Daily Average																															
	No. of invalid days	0	Value valid?																															
	Sum of exceedances	0	Value exceeds ELV (Y/N)																															

Signed …….. Date……..

(Authorised to sign as representative of SITA Surrey Limited)

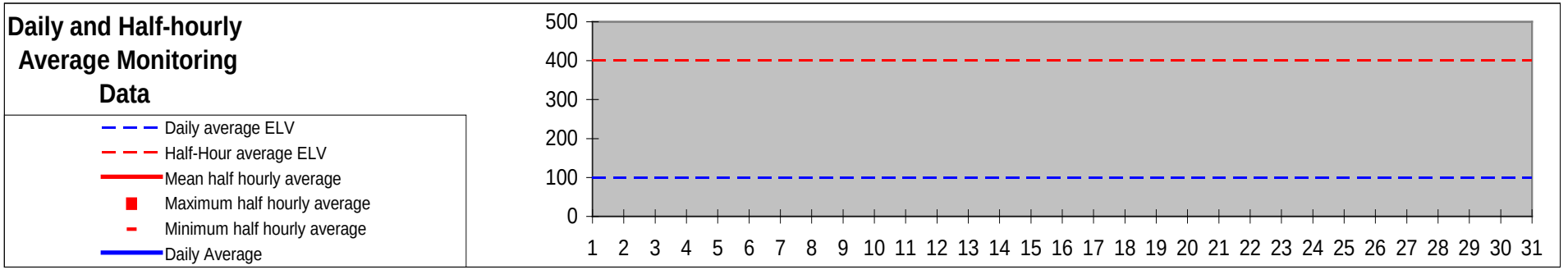
Permit Number: EPR/VP3997NK

Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park

Form Number: Air 6 Gasification Plant Stack – 29/11/14

Reporting of Continuously Monitored Emissions to Air for Oxides of Nitrogen from Emission Point A__ for the month of MM, YYYY



	Monthly summary		Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Half-hourly average			Half-Hour average ELV	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
	Monthly maximum	0	Maximum half hourly average																															
	Monthly mean	####	Mean half hourly average																															
	Monthly minimum	0	Minimum half hourly average																															
	Total invalid results	0	No. of invalid results																															
	Sum of exceedances	0	No. of exceedances of ELV																															
Daily average			Daily average ELV	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	Monthly maximum	0	Daily Average																															
	No. of invalid days	0	Value valid?																															
	Sum of exceedances	0	Value exceeds ELV (Y/N)																															

Signed …….. Date……..

(Authorised to sign as representative of SITA Surrey Limited)

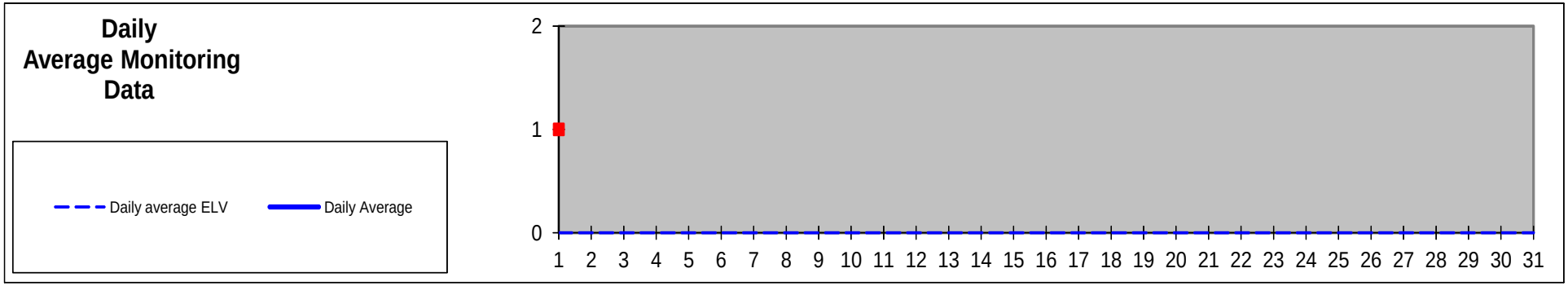
Permit Number: EPR/VP3997NK

Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park

Form Number: Air 7 Gasification Plant Stack – 29/10/14

Reporting of Continuously Monitored Emissions to Air for Ammonia from Emission Point A... for the month of ……, 20__



	Monthly summary		Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
			Daily average ELV	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Daily average	Monthly maximum	0	Daily Average																															
	No. of invalid days	0	Value valid?																															

Signed …… Date……..

(Authorised to sign as representative of SITA Surrey Limited)

Permit Number: EPR/VP3997NK Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park Form Number: Air 8 Gasification Plant Stack – 29/11/14

Reporting of periodically monitored emissions to air for the period from DD/MM/YY to DD/MM/YY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method	Result Date and Time [2]	Uncertainty [3]
A1	Hydrogen fluoride	2 mg/m^3	Periodic over minimum 1-hour period		BS ISO 15713		
A1	Cadmium & thallium and their compounds (total)	0.05 mg/m^3	over minimum 30 minute, maximum 8 hour period		BS EN 14385		
A1	Mercury and its compounds	0.05 mg/m^3	over minimum 30 minute, maximum 8 hour period		BS EN 13211		
A1	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.5 mg/m^3	over minimum 30 minute, maximum 8 hour period		BS EN 14385		
A1	Nitrous oxide	-	Periodic over minimum 1-hour period		BS EN ISO 21258		
A1	Dioxins / Furans (I-TEQ)	0.1 ng/m^3	over minimum 6 hour period, maximum 8 hour period		BS EN 1948 Parts 1, 2 and 3		
A1	Dioxins / furans (WHO-TEQ Humans / Mammals)	No limit applies	over minimum 6 hour period, maximum 8 hour period		BS EN/TS 1948-4		
A1	Dioxins / furans (WHO-TEQ Fish)	No limit applies	over minimum 6 hour period, maximum 8 hour period		BS EN/TS 1948-4		
A1	Dioxins / furans (WHO-TEQ Birds)	No limit applies	over minimum 6 hour period, maximum 8 hour period		BS EN/TS 1948-4		
A1	Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	No limit applies	over minimum 6 hour period, maximum 8 hour period		BS EN/TS 1948-4		
A1	Dioxin-like PCBs (WHO-TEQ Fish)	No limit applies	over minimum 6 hour period, maximum 8 hour period		BS EN/TS 1948-4		
A1	Dioxin-like PCBs (WHO-	No limit applies	over minimum 6 hour period,		BS EN/TS 1948-4		

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method	Result Date and Time [2]	Uncertainty [3]
	TEQ Birds)		maximum 8 hour period				
A1	Poly-cyclic aromatic hydrocarbons (PAHs) Total	No limit applies	over minimum 6 hour period, maximum 8 hour period		BS ISO 11338-1 and BS ISO 1138-2		
A1	Anthanthrene	No limit applies					
A1	Benzo{a}anthracene	No limit applies					
A1	Benzo[b]fluoranthene	No limit applies					
A1	Benzo[k]fluoranthene	No limit applies					
A1	Benzo[b]naph(2,1-d}thiophene	No limit applies					
A1	Benzo[c]phenanthrene	No limit applies					
A1	Benzo[ghi]perylene	No limit applies					
A1	Benzo[a]pyrene	No limit applies					
A1	Cholanthrene	No limit applies					
A1	Chrysene	No limit applies					
A1	Cyclopenta(c,d)pyrene	No limit applies					
A1	Dibenzo[ah]anthracene	No limit applies					
A1	Dibenzo[a,i]pyrene	No limit applies					
A1	Fluoranthene	No limit applies					
A1	Indo[1,2,3-cd]pyrene	No limit applies					
A1	Naphthalene	No limit applies					

[1} For dioxins and dioxin-like PCBs, the result are to 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

[2] The date and time of the sample that produced the result is given.

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

Signed …….. Date……..

(Authorised to sign as representative of SITA Surrey Limited)

Permit Number: EPR/VP3997NK Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park Form Number: Air 9 CHP Gas Engine Stacks – 29/10/14

Reporting of periodically monitored emissions to air for the period from DD/MM/YY to DD/MM/YY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method	Result Date and Time [1]	Uncertainty [2]
A4 & A5	Oxides of nitrogen (NO and NO2 expressed as NO2)	300 mg/m^3	Periodic. Over minimum 4 hour period		BS EN 14792		
A4 & A5	Sulphur Dioxide	350 mg/m^3	Periodic. Over minimum 4 hour period		BS EN 14791		
A4 & A5	Carbon Monoxide	1400 mg/m^3	Periodic. Over minimum 4 hour period		BS EN 15058		
A4 & A5	Total volatile organic compounds (VOCs)	1000 mg/m^3	Periodic. Hourly average		BE EN 12619:1999 or BS EN 13526:2002 depending on concentration		

[1] The date and time of the sample that produced the result is given.
[2] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed …….. Date……..
(Authorised to sign as representative of SITA Surrey Limited)

Permit Number: EPR/VP3997NK Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park Form Number: Air 10 Flare Stacks – 29/11/14

Reporting of periodically monitored emissions to air for the period from DD/MM/YY to DD/MM/YY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method	Result Date and Time [1]	Uncertainty [2]
A6	Oxides of nitrogen (NO and NO2 expressed as NO2)	150 mg/m^3	Periodic. Over minimum 4 hour period		BS EN 14792		
A6	Sulphur Dioxide	395 mg/m^3	Periodic. Over minimum 4 hour period		BS EN 14791		
A6	Carbon Monoxide	50 mg/m^3	Periodic. Over minimum 4 hour period		BS EN 15058		
A6	Total volatile organic compounds (VOCs)	10 mg/m^3	Periodic. Hourly average		BE EN 12619:1999 or BS EN 13526:2002 depending on concentration		

[1] The date and time of the sample that produced the result is given.
[2] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed …… Date……..
(Authorised to sign as representative of SITA Surrey Limited)

Permit Number: EPR/VP3997NK Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park Form Number: WU/RM/AP1 - 29/10/14

Reporting of Water and Raw Material Usage and Ash Production for the year YYYY

Raw Material	Usage	Unit	Specific Usage	Unit
Total Municipal Waste Incinerated		tonnes	-	-
Total C&I waste Incinerated		tonnes	-	-
Total waste digested		tonnes	-	-
Total Facility Mains water		m^3	-	-
Water usage on gasification plant		m^3		m^3/tonne of waste incinerated
Water usage on AD/CHP plant		m^3		m^3/tonne of waste treated
Urea		kg		kg/tonne of waste incinerated
Activated carbon		kg		kg/tonne of waste incinerated
Lime		kg		kg/tonne of waste incinerated

Ash	Production	Unit	Specific Production	Unit
Bottom Ash		kg		kg/tonne of waste incinerated
APC residues		kg		kg/tonne of waste incinerated
Boiler Ash		kg		kg/tonne of waste incinerated

Operator's comments :

Signed …….. Date……..

(Authorised to sign as representative of SITA Surrey Limited)

Permit Number: EPR/VP3997NK

Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park

Form Number: Energy1 – 29/11/14

Reporting of Energy Usage/Export for the year YYYY

Energy Source	Energy Usage/Production	Unit
Total electricity produced by the facility		kWh
Total electricity imported by the facility		kWh
Total electricity exported by the facility		kWh
Total waste heat utilised by the facility		kWh
Total thermal energy exported by the facility		kWh
Gasification plant electricity produced		kWh/tonne waste incinerated
Gasification plant electricity imported		kWh/tonne waste incinerated
Gasification plant electricity exported		kWh/tonne waste incinerated
AD/CHP plant electricity produced		kWh/tonne waste treated
AD/CHP plant electricity imported		kWh/tonne waste treated
AD/CHP plant electricity exported		kWh/tonne waste treated
Gas Oil		Kg/tonne of waste incinerated

Operator's comments :

Signed …… Date……..

(Authorised to sign as representative of SITA Surrey Limited)

Permit Number: EPR/VP3997NK Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park Form Number: Residue 1 – 29/10/14

Reporting of residue quality for the period from DD/MM/YY to DD/MM/YY

	% Carbon (TOC) $^{w}/_{w}$
Bottom Ash	

Ash Composition (Metals, Dioxins, etc.)																				
	Sb mg/kg	**Cd** mg/kg	**Tl** mg/kg	**Hg** mg/kg	**Pb** mg/kg	**Cr** mg/kg	**Cu** mg/kg	**Mn** mg/kg	**Ni** mg/kg	**As** mg/kg	**Co** mg/kg	**V** mg/kg	**Zn** Mg/kg	**DIOXIN I-TEQ ng/kg**	**DIOXIN**			**DIOXIN Like PCB**		
															WHO-TEQ ng/kg			**WHO-TEQ ng/kg**		
															Humans/ mammals	Birds	Fish	Humans/ mammals	Birds	Fish
Bottom Ash																				
APC residues																				
Boiler Ash																				

Signed …….. Date……..

(Authorised to sign as representative of SITA Surrey Limited)

Permit Number: EPR/VP3997NK Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park Form Number: Residue 2 – 29/11/14

Reporting of Ash Solubility for the period from DD/MM/YY to DD/MM/YY

Ash solubility (Metals)													
	Sb mg/kg	**Cd** mg/kg	**Tl** mg/kg	**Hg** mg/kg	**Pb** mg/kg	**Cr** mg/kg	**Cu** mg/kg	**Mn** mg/kg	**Ni** mg/kg	**As** mg/kg	**Co** mg/kg	**V** mg/kg	**Zn** mg/kg
Bottom Ash													
APC residues													
Boiler Ash													

Signed …….. Date……..
(Authorised to sign as representative of SITA Surrey Limited)

Permit Number: EPR/VP3997NK Operator: SITA Surrey Limited

Facility: Charlton Lane Eco Park Form Number: Performance 1 – 29/10/14

Reporting of Performance Parameters for the period from DD/MM/YY to DD/MM/YY

Operation & Emission point	Total number of occasions in quarter	Cumulative number of occasions for calendar year	Cumulative hours for calendar year
IED abnormal operation – A1			
Flare stack operation – A6			

Signed …….. Date……..
(Authorised to sign as representative of SITA Surrey Limited)