

Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2007

Lakeside Energy from Waste Limited

**Lakeside EfW Facility
Lakeside Road
Colnbrook
Slough
Berkshire
SL3 0EG**

Variation notice number

EA/EPR/BT7116IW/V002

Permit number

EPR/BT7116IW

Lakeside Energy From Waste Permit Number EPR/BT7116IW

Introductory note

This introductory note does not form a part of the permit

The following notice, which is issued pursuant to regulation 20 and Part 1 of Schedule 5 of the Environmental Permitting (England and Wales) Regulations S.I.2007 No. 3538 (the Regulations), gives notice of the variation of an environmental permit to operate a regulated facility/facilities

The operator has applied for a variation to the permit to amend the averaging period for carbon monoxide emissions in line with WID and for other minor changes. This is an opportunity to provide a consolidated permit in the latest EPR template

Schedule 1 of this notice lists any deleted conditions, Schedule 2 lists any amended conditions and Schedule 3 lists any conditions that have been added.

Status Log of the permit		
Detail	Date	Response Date
Application BT7116	Received 07/03/2003	Duly made
Schedule 4 Notice requesting further information	Issued 21/03/03	Response received 24/04/03
Request by Agency to extend determination to 10/07/03	Dated 03/06/03	Agreed 12/06/03
Request by Agency to extend determination to 01/09/03	Dated 03/07/03	Agreed 10/07/03
Request by Agency to extend determination to 01/10/03	Dated 07/08/03	Agreed 15/08/03
Request by Agency to extend determination to 01/11/03	Dated 29/09/03	Agreed 05/10/03
Permit BT7116IW	Effective 01/121/2003	
Application for Variation EA/EPR/BT7116IW/V002	Received 30/03/2009	Duly made
Variation EA/EPR/BT7116IW/V002	Effective 01/09/2009	

Other Part A installation permits relating to this installation		
Operator	Permit Number	Date of Issue
Grundon Waste Management Ltd	EPR/BT2866G	14/11/2003

End of Introductory Note

Notice of variation

Environmental Permitting
(England and Wales) Regulations 2007

Permit number

EPR/BT7116IW

The Environment Agency in exercise of its powers under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2007 (SI 2000 No 3538) varies the permit as set out below.

Lakeside Energy from Waste Limited ("the operator"),

whose registered office is

Goulds Grove

Ewelme

Wallingford

Oxfordshire

OX10 6PJ

company registration number 4245965

to operate a facility comprising an installation at

Lakeside Energy from Waste Facility

Lakeside Road

Colnbrook

Slough

Berkshire

SL3 0EG

The notice shall take effect from 01 September 2009

Name	Date

David Nicholson

Authorised on behalf of the Agency

Schedule 1 – conditions to be deleted

The following conditions are deleted

All conditions in the document referenced BT7116IW

Schedule 2 – conditions to be amended

None

Schedule 3 – conditions to be added

The following conditions are added to the permit

All conditions in the document referenced EA/EPR/BT7116IW/V002

Generic Conditions

1 Management

1.1 General management

1.1.1 The activities shall be managed and operated:

- (a) in accordance with a management system, which identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances and closure and those drawn to the attention of the operator as a result of complaints; and
- (b) by sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the activities.

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.

1.2 Accident management plan

1.2.1 The operator shall:

- (a) maintain and implement an accident management plan;
- (b) review and record at least every 4 years or as soon as practicable after an accident, (whichever is the earlier) whether changes to the plan should be made;
- (c) make any appropriate changes to the plan identified by a review.

1.3 Energy efficiency

1.3.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) review and record at least every 4 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.

1.4 Efficient use of raw materials

1.4.1 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 4 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 appropriate further measures identified by a review.

1.5 Avoidance, recovery and disposal of wastes produced by the activities

1.5.1. The operator shall:

- (a) take appropriate measures to ensure that waste produced by the activities is avoided or reduced, or where waste is produced it is recovered wherever practicable or otherwise disposed of in a manner which minimises its impact on the environment;
- (b) review and record at least every 4 years whether changes to those measures should be made; and
- (c) take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

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

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in Blue on the site plan at schedule 2 to this permit, excluding the area edged in red on the site plan. The plan represents the extent of the installation covered by this permit and that of the other operators of the installation.

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 Agency.

(b) If notified by the Agency that the activities are giving rise to pollution, the operator shall submit to the 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, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Agency.

2.3.3 Waste shall only be accepted if:

- (a) it is of a type and quantity listed in schedule 3 table S3.1 and
- (b) it conforms to the description in the documentation supplied by the producer and holder.

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 hazard classification associated with the waste; 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 The operator shall ensure that prior to accepting waste at the site, it has obtained sufficient information about the hazardous wastes to be burned to demonstrate that emission limits can be complied with.
- 2.3.7 Waste shall not be charged, or shall cease to be charged, if:
- (a) the combustion chamber temperature is below, or falls below, 850°C or
 - (b) any continuous emission limit value in Schedule 4 Table S 4.1(a) is exceeded; or
 - (c) any continuous emission limit value in Schedule 4 Table S 4.1 is exceeded, other than under WID abnormal operating conditions ; or
 - (d) monitoring results required to demonstrate compliance with any continuous emission limit value in Schedule 4 Table S 4.1 are unavailable other than under WID abnormal operating conditions
- 2.3.8 The operator shall have at least one auxiliary burner in each line at start-up or shut-down or whenever the operating temperature falls below that specified in condition 2.3.7 as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.3.7 is maintained in the combustion chamber, such burner(s) may be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.
- 2.3.9 The operator shall record the beginning and end of each period of WID abnormal operation.
- 2.3.10 During a period of WID abnormal operation, the operator shall restore normal operation of the failed equipment or replace the failed equipment as rapidly as possible.
- 2.3.11 Where, during WID abnormal operation, any of the following situations arise, the operator shall, as soon as is practicable, cease the burning of waste until normal operation can be restored:
- (a) continuous measurement shows that an emission exceeds any emission limit value in Schedule 4 Table S 4.1 due to disturbances or failures of the abatement systems, or continuous emission monitor(s)
 - (b) the cumulative duration of WID abnormal operation periods over one calendar year exceeds 60 hours on an incineration line;
 - (c) continuous measurement shows that an emission exceeds any emission limit value in Schedule 4 Table S 4.1 (a) due to disturbances or failures of the abatement systems;
 - (d) the alternative techniques to demonstrate compliance with the WID abnormal operation emission limit value(s) for particulates, TOC and / or CO in Schedule 4 Table S 4.1 (a), as detailed in the application or as agreed in writing with the Agency, are unavailable.
- 2.3.12 The operator shall interpret the end of the period of WID 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 Agency;
 - (c) when a period of 4 hours has elapsed from the start of the WID abnormal operation;
 - (d) when, in any calendar year, an aggregated period of 60 hours WID abnormal operation has been reached for a given incineration line.
- 2.3.13 Bottom 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 Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Agency, the operator shall notify the Agency within 14 days of completion of each improvement.

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 4 tables S4.1, S4.2 and S4.3 except in WID 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 4 tables S4.1(a), S4.2 and S4.3.
- 3.1.2 The limits given in schedule 4 shall not be exceeded.
- 3.1.3 Wastes produced at the site shall, as a minimum, be sampled and analysed in accordance with Table schedule 4 S4.7. 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 Fugitive emissions of substances

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

3.3 Odour

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

3.4 Noise and vibration

- 3.4.1 The level of noise emitted from the site shall not exceed the limits in Table 3.4.1 as measured or assessed at the locations specified in that Table. The locations shall be chosen and the measurements and assessment made according to BS4142:1997.
- 3.4.2 Noise assessments, resulting from noise monitoring at agreed locations, shall be carried out to demonstrate that the noise from the Permitted Installation shall not exceed the level in Table 3.4.1

Location	L _{Aeq, 5 minute} dB(A)	Assessment Frequency
Pippins School	39	Bi-annual
The Hawthorns	39	Bi-annual
Myrtle Close	39	Bi-annual

- 3.4.3 The operator shall:
- if notified by the Agency that the activities are giving rise to annoyance outside the site due to noise and vibration, submit to the Agency for approval within the period specified, a noise and vibration management plan;
 - implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Agency.

3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Agency, undertake the monitoring specified in the following tables in schedule 4 to this permit:
- point source emissions specified in tables S4.1, and S4.1(a);
 - noise specified in table S4.4;
 - ambient air monitoring specified in table S4.5;
 - land specified in table S4.6
 - residue quality in table S4.7
- 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 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 Table S4.1. 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 4 tables S4.1, S4.2 and S4.3 unless otherwise specified in that schedule.

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 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 All records, plans and the management system required to be maintained by this permit shall be held on the site.

4.2 Reporting

- 4.2.1 All reports and notifications required by the permit shall be sent to the Agency using the contact details supplied in writing by the Agency
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Agency by 31 January (or other date agreed in writing by the 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 5 table S5.2; and
 - (c) the performance parameters set out in schedule 5 table S5.3 using the forms specified in table S5.4 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 Article 12(2) of the Waste Incineration Directive) give an account of the running of the process and the emissions into air and water compared with the emission standards in the WID.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the 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 5 table S5.1;
 - (b) for the reporting periods specified in schedule 5 table S5.1 and using the forms specified in schedule 5 table S5.4 ; 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 4 years, submit to the Agency, within 6 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 one month of the end of each quarter, the operator shall submit to the 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 Agency shall be notified without delay following the detection of:
- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution;
 - (b) the breach of a limit specified in the permit; or
 - (c) any significant adverse environmental effects.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 6 to this permit within the time period specified in that schedule.
- 4.3.3 Where the 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 Agency when the relevant monitoring is to take place. The operator shall provide this information to the Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The 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;
- (b) any change to particulars of the operator's ultimate holding company (including details of an ultimate holding company where an operator has become a subsidiary); and
- (c) 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 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 Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

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

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

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 7 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

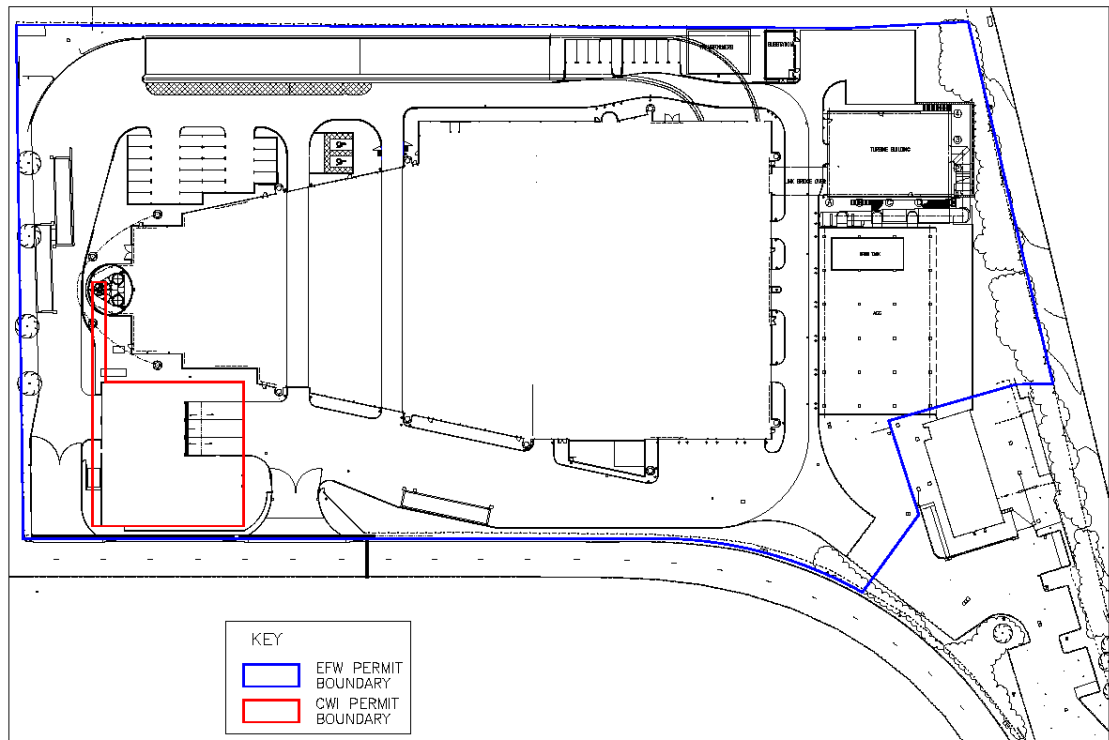
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity and waste types
A1	Section 5.1 Part A(1) (c)	Incineration of municipal and commercial wastes	Entire plant from receipt of waste to disposal of residues

Table S1.2 Operating techniques

Description	Parts	Date Received
Application	Response to question B2.1 given in section 2.1 of the Application. Response to question B2.2 given in section 2.2 of the Application. Response to question B2.3 given in section 2.3 of the Application. Response to question B2.4 given in section 2.4 of the Application. Response to question B2.5 given in section 2.5 of the Application. Response to question B2.6 given in section 2.6 of the Application. Response to question B2.7 given in section 2.7 of the Application. Response to question B2.8 given in section 2.8 of the Application. Response to question B2.9 given in section 2.9 of the Application. Response to question B2.10 given in section 2.10 of the Application. Response to question B2.11 given in section 2.11 of the Application	07/01/2003
Schedule 4 Notice dated 21/03/2003	Response to questions 1, 2, 32, 33, 34, 35,36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 57, 58, 59, 60 and 61	13/04/2003
Application for Variation dated 26/03/2009	Whole application	30/03/2009
Further information	All additional information to the application for variation	01/07/2009

Table 1.3: Improvement programme requirements		
Reference	Requirement	Date
1.3.1	The Operator shall submit a written report to the Agency on establishing an Environmental Management System having regard to section 2.3 of the Sector Guidance.	Within 12 months of completion of Commissioning
1.3.2	The Operator shall submit a written post commissioning report to the Agency. The report shall be based on the submitted and agreed commissioning plan.	Within 3 months of completion of Commissioning
1.3.3	The Operator shall carry out checks to verify the residence time, minimum temperature and oxygen content of the exhaust gases whilst operating under the anticipated most unfavourable operating conditions. The results shall be submitted in writing to the Agency.	Within 3 months of completion of Commissioning
1.3.4	The Operator shall carry out tests to demonstrate that hydrogen chloride may be considered to be a surrogate of hydrogen fluoride for the purposes of condition 6.1.3 of this Permit. The results shall be submitted in writing to the Agency.	Within 6 months of completion of Commissioning
1.3.5	The Operator shall review the availability of methods to determine the size distribution of the particulate matter in the exhaust gas emissions, identifying the fractions within the PM ₁₀ , PM _{2.5} and PM _{1.0} ranges and submit a written report to the Agency.	Within 12 months of completion of Commissioning and annually thereafter.
1.3.6	The Operator shall review the techniques for continuous measurement for heavy metals, dioxins / furans and dioxin-like PCBs, including cost, availability, accuracy, detection limits and submit a written report to the Agency.	Within 12 months of completion of Commissioning
1.3.7	The Operator shall make a summary of continuous emission monitoring data available on the internet, in a format similar to that provided to the Agency.	To be available on completion of commissioning and thereafter on a weekly basis
1.3.8	The Operator shall submit a report to Agency to confirm or recommend changes to the definitions of "start-up" and "shutdown".	Within 12 months of completion of Commissioning
1.3.9	The Operator shall submit a written protocol for representative sampling and analysis for the determination of total organic carbon, loss-on-ignition, composition and leachability of the Bottom Ash and APC residues to the Agency in writing for approval and thereafter operate in accordance with this written protocol.	Completed
1.3.10	The Operator shall prepare and submit to the Agency a written report on the opportunity to recycle, reduce or reuse the incinerator ash (both bottom ash and APC residues).	Within 12 months of completion of Commissioning
1.3.11	The Operator shall submit to the Agency in writing details of the boiler dosing regime.	Within 3 months of completion of Commissioning.

Schedule 2 - Site plan



Schedule 3 - Waste types, raw materials and fuels

Table S3.1 Permitted fuel and waste types and quantities for Incineration	
Fuel	Any fuel that has been derived from waste but is no longer classified as a waste
Waste code	Description

02 02 wastes from the preparation and processing of meat, fish and other foods of animal origin

02 02 02 animal-tissue waste

02 02 03 materials unsuitable for consumption or processing

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

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

02 07 02 wastes from spirits distillation

02 07 04 materials unsuitable for consumption or processing

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 05 de-inking sludges from paper recycling

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

04 01 wastes from the leather and fur industry

04 01 08 waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium

04 01 09 wastes from dressing and finishing

04 02 wastes from the textile industry

04 02 09 wastes from composite materials (impregnated textile, elastomer, plastomer)

04 02 10 organic matter from natural products (for example grease, wax)

04 02 15 wastes from finishing other than those mentioned in 04 02 14

04 02 21 wastes from unprocessed textile fibres

04 02 22 wastes from processed textile fibres

08 01 wastes from MFSU and removal of paint and varnish

08 01 12 waste paint and varnish other than those mentioned in 08 01 11

08 01 18 wastes from paint or varnish removal other than those mentioned in 08 01 17

08 02 wastes from MFSU of other coatings (including ceramic materials)

08 02 01 waste coating powders

08 03 18 waste printing toner other than those mentioned in 08 03 17

08 04 wastes from MFSU of adhesives and sealants (including waterproofing products)

08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

09 01 wastes from the photographic industry

09 01 07 photographic film and paper containing silver or silver compounds

09 01 08 photographic film and paper free of silver or silver compounds

09 01 10 single-use cameras without batteries

09 01 12 single-use cameras containing batteries other than those mentioned in 09 01 11

12 01 wastes from shaping and physical and mechanical surface treatment of metals and plastics

12 01 05 plastics shavings and turnings

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 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 19 plastic

16 01 22 components not otherwise specified

16 02 wastes from electrical and electronic equipment

16 02 14 discarded equipment other than those mentioned in 16 02 09 to 16 02 13

16 02 16 components removed from discarded equipment other than those mentioned in 16 02 15

16 03 off-specification batches and unused products

16 03 04 inorganic wastes other than those mentioned in 16 03 03

16 03 06 organic wastes other than those mentioned in 16 03 05

17 02 wood, glass and plastic

17 02 01 wood

17 02 03 plastic

17 03 bituminous mixtures, coal tar and tarred products

17 03 02 bituminous mixtures other than those mentioned in 17 03 01

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 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

18 01 wastes from natal care, diagnosis, treatment or prevention of disease in humans

18 01 04

wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)

18 01 09 medicines other than those mentioned in 18 01 08

18 02 wastes from research, diagnosis, treatment or prevention of disease involving animals

18 02 03 wastes whose collection and disposal is not subject to special requirements in order to prevent infection

18 02 08 medicines other than those mentioned in 18 02 07

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

19 03 stabilised/solidified wastes (4)

19 03 05 stabilised wastes other than those mentioned in 19 03 04

19 03 07 solidified wastes other than those mentioned in 19 03 06

19 05 wastes from 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 waste

19 05 03 off-specification compost

19 06 wastes from anaerobic treatment of waste

19 06 04 digestate from anaerobic treatment of municipal waste

19 06 99 wastes not otherwise specified

19 08 wastes from waste water treatment plants not otherwise specified

19 08 01 screenings

19 08 02 waste from desanding

19 08 09 grease and oil mixture from oil/water separation containing edible oil and fats

19 09 wastes from the preparation of water intended for human consumption or water for industrial use

19 09 01 solid waste from primary filtration and screenings

19 10 wastes from shredding of metal-containing wastes

19 10 04 fluff-light fraction and dust other than those mentioned in 19 10 03

19 10 06 other fractions other than those mentioned in 19 10 05

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 04 plastic and rubber

19 12 07 wood other than that mentioned in 19 12 06

19 12 08 textiles

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

19 13 wastes from soil and groundwater remediation

19 13 02 solid wastes from soil remediation other than those mentioned in 19 13 01

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 36 discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35

20 01 38 wood other than that mentioned in 20 01 37

20 01 39 plastics

20 01 41 wastes from chimney sweeping

20 01 99 other fractions not otherwise specified

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

20 03 99 municipal wastes not otherwise specified

Schedule 4 – Emissions and monitoring

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency ^(Note 8)	Monitoring standard or method
A1 & A2	Particulate matter	-	30 mg/m ³	½-hr average	Continuous measurement	BS EN 13284-2 [Note 5] [Note 7]
A1 & A2	Particulate matter	-	10 mg/m ³	daily average	Continuous measurement	BS EN 13284-2 [Note 5] [Note 7]
A1 & A2	Total Organic Carbon (TOC)	-	20 mg/m ³	½-hr average	Continuous measurement	BS EN 12619 [Note 5] [Note 7]
A1 & A2	Total Organic Carbon (TOC)	-	10 mg/m ³	daily average	Continuous measurement	BS EN 12619 [Note 5] [Note 7]
A1 & A2	Hydrogen chloride	-	60 mg/m ³	½-hr average	Continuous measurement	MCERTS certified instruments [Note 6] [Note 7]
A1 & A2	Hydrogen chloride	-	10 mg/m ³	daily average	Continuous measurement	MCERTS certified instruments [Note 6] [Note 7]
A1 & A2	Hydrogen chloride	-	30 mg/m ³	periodic over minimum 1-hour period	Bi-annual	BS EN 1911
A1 & A2	Hydrogen fluoride	-	2 mg/m ³	periodic over minimum 1-hour period	Bi-annual	USEPA Method 26/26A
A1 & A2	Carbon monoxide	-	150 mg/m ³	95% of all 10-minute averages in any 24-hour period	Continuous measurement	ISO 12039 [Note 3] [Note 7]
A1 & A2	Carbon monoxide	-	50 mg/m ³	daily average	Continuous measurement	ISO 12039 [Note 3] [Note 7]
A1 & A2	Sulphur dioxide	-	200 mg/m ³	½-hr average	Continuous measurement	BS 6069-4 [Note 4] [Note 7]
A1 & A2	Sulphur dioxide	-	50 mg/m ³	daily average	Continuous measurement (See Drafting Note above)	BS 6069-4 [Note 4] [Note 7]
A1 & A2	Sulphur dioxide	-	200 mg/m ³	periodic over minimum 4 hour period, data to be reported as ½ hour averages	Bi-annual	BS 6069-4.1
A1 & A2	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂) [Note 8]	-	400 mg/m ³	½-hr average	Continuous measurement	ISO 10849 [Note 4] [Note 7]

A1 & A2	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂) [Note 8]	-	200 mg/m ³	daily average	Continuous measurement	ISO 10849 [Note 4] [Note 7]
A1 & A2	Cadmium & thallium and their compounds (total) [Note 1]	-	0.05 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Bi-annual	BS EN 14385
A1 & A2	Mercury and its compounds [Note 1]	-	0.05 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Bi-annual	BS EN 13211
A1 & A2	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total) [Note 1]	-	0.5 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Bi-annual	BS EN 14385
A1 & A2	Nitrous Oxide	-	-	Periodic over minimum 1 hour period	Bi-annual	VDI 2469-1 or VDI 2469-2
A1 & A2	Ammonia	-	-	Half hour average and daily average	Continuous measurement	MCERTS
A1 & A2	Dioxins / furans (I-TEQ)	-	0.1 ng/m ³	periodic over minimum 6 hours, maximum 8 hour period [Note 2]	Bi-annual	BS EN 1948
A1 & A2	Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	-	-	bi-annual periodic measurement average value over sample period of between 6 and 8 hours. [Note 2]		To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)
A1 & A2	Dioxin-like PCBs (WHO-TEQ Fish)	-	-	bi-annual periodic measurement average value over sample period of between 6 and 8 hours. [Note 2]		To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)

A1 & A2	Dioxin-like PCBs (WHO-TEQ Birds)	-	-	bi-annual periodic measurement average value over sample period of between 6 and 8 hours. ^[Note 2]	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)
A1 & A2	Specific individual poly-cyclic aromatic hydrocarbons (PAHs), as specified in Schedule 7.	-	-	bi-annual periodic measurement average value over sample period of between 6 and 8 hours.	Procedure shall use BS ISO 11338-1 and BS-ISO 11338- 2.
A1 & A2	Dioxins / furans (WHO-TEQ Humans / Mammals)	-	-	bi-annual periodic measurement average value over sample period of between 6 and 8 hours. ^[Note 2]	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)
A1 & A2	Dioxins / furans (WHO-TEQ Fish)	-	-	bi-annual periodic measurement average value over sample period of between 6 and 8 hours. ^[Note 2]	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)
A1 & A2	Dioxins / furans (WHO-TEQ Birds)	-	-	bi-annual periodic measurement average value over sample period of between 6 and 8 hours. ^[Note 2]	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)

Note 1: Metals include gaseous, vapour and solid phases as well as their compounds (expressed as the metal or the sum of the metals as specified). Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V mean antimony, arsenic, lead, chromium, cobalt, copper, manganese, nickel and vanadium respectively.

Note 2: The I-TEQ or WHO-TEQ sum of the equivalence factors 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.

Note 3: The Continuous Emission Monitors used shall be such that the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed 10%. Valid 10-minute average values shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted this value of the confidence interval (10%). Where it is necessary to calibrate or maintain the monitor and this means that data is not available for a complete 10-minute, the 10-minute average shall nonetheless be considered valid if measurements are available for a minimum of 7 minutes during the 10-minute period. The number of 10-minute averages so validated shall not exceed 15 per day. Daily average values shall be determined as the average of all the valid 10-minute average values within a calendar day. The daily average value will be considered valid if no more than fifteen 10-minute average values in any day have been determined not to be valid. No more than ten daily average values per year shall be determined not to be valid.

Note 4: The Continuous Emission Monitors used shall be such that the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed 20%. Valid half-hourly average values shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted this value of the confidence interval (20%). Where it is necessary to calibrate or maintain the monitor and this means that data is not available for a complete half-hour period, the half-hourly average shall nonetheless be considered valid if measurements are available for a minimum of 20 minutes during the half-hour period. (The number of half-hourly averages so validated shall not exceed 5 (or such other number justified in the Application) per day). Daily average values shall be determined as the average of all the valid half-hourly average values within a calendar day. The daily average value will be considered valid if no more than five half-hourly average values in any day have been determined not to be valid. No more than ten daily average values per year shall be determined not to be valid.

Note 5: As Note 4, except that the value of the confidence interval is 30% in place of 10%.

Note 6: As Note 4, except that the value of the confidence interval is 40% in place of 10%.

Note 7: MCERTS certification to the appropriate ranges and determinands is a demonstration of compliance to the applicable standards.

Note 8: Where Bi-annual monitoring is specified this shall be carried out quarterly during the first year of operation

Table S4.1(a) Point source emissions to air during abnormal operation of incineration plant – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 & A2	Particulate matter	150 mg/m ³	½-hr average	Continuous measurement	BS EN 13824-2 ^[Note 1] ^[Note 3] during abatement plant failure during failure of the continuous emission monitor
A1 & A2	Total Organic Carbon (TOC)	20 mg/m ³	½-hr average	Continuous measurement	BS EN 12619 ^[Note 1] ^[Note 3] during abatement plant failure during failure of the continuous emission monitor
A1 & A2	Carbon monoxide	100 mg/m ³	½-hr average	Continuous measurement	ISO 12039 ^[Note 2] ^[Note 3] during abatement plant failure during failure of the continuous emission monitor

Note 1: The Continuous Emission Monitors used shall be such that the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed 30%. Valid half-hourly average values shall be determined within the effective operating time from the measured values after having subtracted this value of the confidence interval (30%).

Note 2: As Note 1, except that the value of the confidence interval is 10% in place of 30%.

Note 3: MCERTS certification to the appropriate ranges and determinands is a demonstration of compliance to the applicable standards.

Table S4.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit	Reference Period	Monitoring frequency	Monitoring standard or method
Soakaways as per the site drainage plan	None	Uncontaminated roof water and surface water from hard standings	None specified	-	-	-

Table S4.3 Point Source emissions to sewer – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit	Reference Period	Monitoring frequency	Monitoring standard or method
S1	None	Waste water from operations.	None specified	-	-	-

Table S4.4 Noise monitoring requirements

Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
As described in the report submitted in response to pre-operational condition 1.1.3 m in the original permit	Sound level	Bi-annual	As per report	-

Table S4.5 Ambient air monitoring requirements

Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Independent air quality assessment, at locations agreed with the Agency	Nitrogen Dioxide Carbon Monoxide Sulphur Dioxide Particulates	Annually	N/A	The results with an assessment against pre-operational values shall be reported in writing annually to the Agency.

Table S4.6 Land monitoring requirements

Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Grass and soil monitoring programme at locations agreed with the Agency.	polychlorinated dibenzo- <i>p</i> -dioxins and polychlorinated dibenzofurans (PCDDs/PCDFs) and heavy metals	Annually	N/A	The results with an assessment against pre-operational values shall be reported in writing annually to the Agency

Table S4.7 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 or LOI.	3%(for TOC) 5% (for LOI)	Quarterly	Agency ash sampling protocol.	-
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 Agency ash sampling protocol.	-
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 Agency ash sampling protocol.	-
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 Agency ash sampling protocol.	-
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 Agency ash sampling protocol.	-

Schedule 5 - Reporting

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

Table S5.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1.	A1 & A2	Monthly	01 September 2009
Noise monitoring Parameters as required by condition 3.5.1	-	Every 12 months Submission in September	01 September 2009*
Ambient air monitoring Parameters as required by condition 3.5.1	-	Every 12 months Submission in September	01 September 2009*
Land monitoring Parameters as required by condition 3.5.1	-	Every 12 months Submission in September	01 September 2009*
Residue quality Parameters as required by condition 3.5.1	-	Every 6 months	01 September 2009

* First reports to be submitted September 2010

Table S5.2: Annual production/treatment		
Parameter		Units
Total Waste Incinerated		Tonnes

Table S5.3 Performance parameters		
Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Total lime used	Annually	tonnes
Total activated carbon used	Annually	tonnes
Periods of abnormal operation	Monthly	-
Periods of no operation	Monthly	-

Table S5.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Continuous monitoring Form S3/A/1 or other form as agreed in writing by the Agency	01/08/2009
Air	Bi-annual periodic measurement Forms S3/A/2, S3/A/3, S3/A/4, S3/O/1 or other form as agreed in writing by the Agency	01/08/2009
Solid residues	Form S3/O/1 or other form as agreed in writing by the Agency	01/08/2009
Plant Operation	Forms S3/O/2, S3/O/3	01/08/2009
Noise	Form S3/N/1	01/08/2009
Other performance indicators	Form S3/P/1 or other form as agreed in writing by the Agency	01/08/2009

Schedule 6 - Notification

These pages outline the information that the operator must provide.

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

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

Part A

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

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution

To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit

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

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period
Any continuously monitored substance when the breach is between 12:00 hrs on a Friday and 00:00 hours on a Monday	By 12:00 hours on the Monday

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

Part B - to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of Lakeside Energy from Waste Limited

Schedule 7 - Interpretation

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

"accident" means an accident that may result in pollution.

"annually" means once every year.

"APC residues" means air pollution control residues

"application" means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

"authorised officer" means any person authorised by the 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.

"bi-annual" means twice per year with at least five months between tests;

"bottom ash" means ash falling through the grate and/or transported by the grate;

"CEM" Continuous emission monitor

"CEN" means Comité Européen de Normalisation

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

"disposal" means any of the operations provided for in Annex IIA to Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on Waste.

"dioxin and furans" means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

"emissions to land", includes emissions to groundwater

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2007 No.3538 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"fugitive emission" means an emission to air, water or land from the activities which is not controlled by an emission or background concentration limit.

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

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

"infectious clinical waste" means clinical waste incorporating substances containing viable micro-organisms or their toxins which are known or reliably believed to cause disease in man or other living organisms

"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 condition 6.1.5

"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 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on Waste.

"shutdown" is any period where the plant is being returned to a non-operational state and the oxygen content of the exhaust gases exceeds 16% or agreed in writing with the Agency.

"start-up" is any period, where the plant has been non-operational, until waste has been fed to the plant in sufficient quantity to initiate steady-state conditions or agreed in writing with the 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.

"WFD" means Waste Framework Directive (Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on Waste).

"Waste Incineration Directive" means Directive 2000/76/EC on the incineration of waste (O.J. L 332, 28.12.2000)

"WID 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 concentrations in the discharges into air and the purified waste water of the regulated substances may exceed the normal emission limit values.

"year" means calendar year ending 31 December.

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

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

in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or

in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

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,

where hazardous wastes are burned in an incineration or co-incineration plant and the emissions of pollutants are reduced by gas treatment, standardisation of the gas with respect to oxygen content shall be carried out only if the oxygen concentration measured over the same period exceeds the relevant oxygen content defined in conditions (a) – (c) above. In other cases, the measured emissions shall be standardised only for moisture, pressure and temperature.

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.

TEF schemes for dioxins and furans				
Congener	I-TEF(1990)	WHO-TEF (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	0.0001	-	-
Furans				
2,3,7,8-TCDF	0.1	0.1	0.05	1
1,2,3,7,8-PeCDF	0.05	0.05	0.05	0.1
2,3,4,7,8-PeCDF	0.5	0.5	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	0.0001	0.0001	0.0001

TEF schemes for dioxin-like PCBs			
Congener	WHO-TEF (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)	0.0001	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)	0.01	0.00005	0.001
Mono-ortho PCBs			
2,3,3',4,4'-PeCB (105)	0.0001	<0.000005	0.0001
2,3,4,4',5-PeCB (114)	0.0005	<0.000005	0.0001
2,3',4,4',5-PeCB (118)	0.0001	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.0001	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.0005	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.0005	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00001	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.0001	<0.000005	0.00001

END OF PERMIT