ENVIRONMENT AGENCY

Variation Notice with introductory note

Pollution Prevention and Control Regulations 2000

Allington Incinerator

Kent Enviropower Limited
Allington Quarry
Laverstoke Road
Maidstone
Kent
ME16 0LE

Variation Notice number

BP3837ML

Permit number

BR4551

Version 1 - October 2001

Introductory note

This introductory note does not form a part of the Variation Notice.

The following Notice is issued under Regulation 17 of The Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I.2000 No. 1973 (as amended) (the Regulations) to vary the conditions of a Permit issued under the Regulations to operate an installation.

The Notice comprises Schedule A containing conditions to be deleted, Schedule B conditions to be amended and Schedule C conditions to be added. The Notice is subject to the express conditions set out in Schedules A to C.

The Permit, as amended by this Variation Notice, contains conditions, which have to be complied with. It should be noted that aspects of the operation of the installation which are not regulated by those conditions are subject to the condition implied by Regulation 12(10) of the PPC Regulations, that the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation. Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

This variation makes some minor changes to amend cross-referencing errors in the permit, includes the MRF as a listed activity within the permit, gives titles to tables and amends some of the reporting forms and the monitoring requirements for parameters required in the Environment Agency standard WID template. Abnormal operations have been more clearly defined and the restriction on operating hours has been removed following similar changes to the planning permission. The requirement to use 0.1% low sulphur fuel has been removed, as this will not be widely available in 2008 when this will be a legal requirement.
The main purpose of the activity at the installation remains as described in Permit BR4551.

Other PPC Permits relating to this installation		
Permit holder	**Permit Number**	**Date of Issue**
None.		

Superseded Licenses/Consents/Authorisations relating to this installation		
Holder	**Reference Number**	**Date of Issue**
None.		

Talking to us

If you contact the Agency about this Permit please quote the Permit Number.

The Operator should use the Emergency Hotline telephone number (0800 80 70 60) or any other number notified to it to give a notification under condition 5.1.1 of the Permit.

Confidentiality

The Permit/Variation requires the Operator to provide information to the Agency. The Agency will place the information onto the public registers in accordance with the requirements of the PPC Regulations. If the Operator considers that any information provided is commercially confidential, it may apply to the Agency to have such information withheld from the register as provided in the PPC Regulations. To enable the Agency to determine whether the information is commercially confidential, the Operator should clearly identify the information in question and should specify clear and precise reasons.

Variations to the permit

This Permit may be varied in the future. The Status Log within the Introductory Note to any such variation will include summary details of the Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Surrender of the permit

Before this Permit can be wholly or partially surrendered, an application to surrender the Permit has to be made. For the applicant to be successful, they would have to be able to demonstrate to the Agency, in accordance with Regulation 19 of the PPC Regulations, that there is no pollution risk and that no further steps are required to return the site to a satisfactory state.

Transfer of the permit or part of the permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 18 of the PPC Regulations. A transfer will be allowed unless the Agency considers that the proposed holder will not be the person who will have control over the operation of the installation or will not ensure compliance with the conditions of the transferred Permit. If the Permit authorises the carrying out of a specified waste management activity, then there is a further requirement that the transferee is considered to be a "fit and proper person" to carry out that activity.

Status Log

Detail	Date	Comment
Application BR4551	Received 31.01.02	
Application BR4551	Duly made 04.02.02	
Response to request for information (Sch 4)	Request dated 18.04.02	Response dated --.05.02
Response to request for information(Sch 4)	Request dated 30.04.02	Response dated 13.06.02
Supplementary information 1 Groundwater & construction issues Incoming waste handling and treatment Boiler & Furnace issues Clarification of relationship between KEL and WRG Noise Environmental Monitoring Programme Revised General Layout Diagram	Received 20.08.02	Issued to consultees
Supplementary information 2 Revised details of incoming waste handling and preparation.	Received 27.08.02	Issued to consultees.
Request to extend determination	Request dated 15.07.02	Request accepted 16.07.02
Supplementary information package 3 Revised BAT Assessment Response to Comments Phase 2 Site Report Management Structure of KEL . Off-site monitoring programme	Received 22.11.02	Sent to consultees and pubic registers 26.11.02
Verbal request to extend determination to end of March 2003	Request made on 18th Feb 2003	Letter of acceptance received 20th Feb 2003
Copies of approvals from landowners for conducting off site monitoring programme	11th March 2003	Off site monitoring now in compliance with Regulations.
Supplementary information 4 BAT Assessment for the Contribution from the Waste Management Facility to Acid Deposition at Wouldham to Detling Escarpment	23rd April 2003	Report was at the request of English Nature.
Permit BR4551	Determined	August 27th 2003
Variation BX4518	Determined	March 15th 2004
Variation GP3235LE	Determined	January 31st 2006
Variation **BP3837ML**	Received 16 November 2006	Issued 20 March 2007

End of Introductory Note.

ENVIRONMENT AGENCY

Variation Notice

Permit number **(The Permit)**
BR4551

Variation Notice number

BP3837ML

The Environment Agency in exercise of its powers under Regulation 17 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I. 2000 No. 1973) (as amended), hereby varies the Permit issued on 27.08.2003 and held by you.
Kent Enviropower Ltd ("the Operator"),

Of/ whose Registered Office is
Ground Floor West
900 Pavilion Drive
Northampton Business Park
Northampton
NN4 7RG.

Company registration number 2894377.

which relates to the operation of *an* Installation at
Allington Quarry
Laverstoke Road
Allington
Maidstone
Kent ME16 0LY.

to the extent set out in Schedules A to C of this Variation Notice.

This Notice shall take effect from 20 March *2007 at 00.01 hours*

Signed

Cantor Mocke.

Authorised to sign on behalf of the Environment Agency

Date

20 March 2007

SCHEDULE A - CONDITIONS TO BE DELETED

1. **Condition 2.2.2 shall be deleted.**
2. **Condition 2.9.2 shall be deleted.**

SCHEDULE B - CONDITIONS TO BE AMENDED

3. Condition 1.1.1 and Table 1.1.1 shall be amended to:

1.1.1 The operator is authorised to carry out the activities and/or the associated activities specified in Table 1.1.1

Table 1.1.1

Activity under Schedule 1 of the Regulations/ Associated Activity	Description of specified activity	Schedule 1 Activity Reference (if applicable)	Limits of specified activity
Receipt and storage of municipal waste and equivalent categories of industrial and commercial waste	Receive waste from external contractors and storage prior to processing.	Directly associated activity	Receipt of waste and storage in raw waste bunker.
Separation of recyclable materials and shredding of the residues	Operation of the materials recycling facility (MRF), removal of selected recyclable materials from the waste streams and shredding of the residues.	5.3 A(1)(c)(ii)	Delivery to the Materials Recovery Facility (MRF) including the storage of recyclable materials and transport from site.
The incineration of non-hazardous waste in an incineration plant with a capacity of 1 tonne or more per hour. (only municipal waste and equivalent categories of industrial and commercial waste is permitted)	Feedstock management, combustion operations, gas cleaning and discharge.	5.1 A(1)(c)	From feedstock management and selection to point of discharge to the environment.
Production of steam for generation of electricity and off site use	Steam Generation, turbine generator operation	Directly associated activity	To output to grid of electricity. To discharge of steam off site.
Abatement of flue gas	Lime and activated carbon injection. Flue gas recirculation. Urea injection. Bag Filter abatement.	Directly associated activity	Compliance with emission limits at release points specified.
Management of bottom ash and APC residues	Residue handling and storage	Directly associated activity	Including loading and storage on off-site transfer vehicles as far as the site boundary.

4. Condition 2.3.2 and table 2.3.2 shall be amended to:

2.3.2 Only the waste types and quantities specified in Table 2.3.2 shall be incinerated or treated in the MRF in the permitted installation.

Table 2.3.2: Permitted Waste Types		
Description	**European Waste Catalogue Number (Where Available) or other specification**	**Nominal design throughput**
Mixed Municipal Waste and the equivalent categories of industrial and commercial waste.	**Shredding** 191001, 191002, 191004, 191006 **Mechanical Treatment** 191201, 191202, 191203, 191204, 191205, 191207 191208,191210,191212 **Separately Collected Fractions** 200301,200302,200303, 200101,200102,200108, 200110,200111,200138 200139, 200140,	500, 000 tonnes per annum (1)

Note: (1). At design calorific value of the waste and assuming 7800 hrs operation.

5. Condition 2.3.10 and table 2.3.10 shall be amended to:

2.3.10 During a period of abnormal operation, the limits for emissions to air for the parameter(s) and emission point(s) set out in Table 2.3.10 shall not be exceeded.

Table 2.3.10 : Emission limits to air and monitoring during abnormal operating conditions				
Emission point reference	**Parameter**	**Limit (including Reference Period)[1]**	**Monitoring frequency**	**Monitoring method**
A1, A2 and A3	Particulate matter	150 mg/m^3 ½-hr average	Continuous measurement	BS EN 13824-2[4 2] during abatement plant failure or during failure of the continuous emission monitor
A1, A2 and A3	Total Organic Carbon (TOC)	20 mg/m^3 ½-hr average	Continuous measurement	BS EN 12619[4 2] during abatement plant failure or during failure of the continuous emission monitor
A1, A2 and A3	Carbon monoxide	100 mg/m^3 ½-hr average	Continuous measurement	ISO 12039[4 3] during abatement plant failure or during failure of the continuous emission monitor

Note 1: See Section 10.1.1 for reference conditions

Note 2: 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 (excluding the start-up and shut-down periods if no waste is being incinerated) from the measured values after having subtracted this value of the confidence interval (30%). 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 per day).

Note 3: As Note 2, except that the value of the confidence interval is 10% in place of 30%.

Note 4: MCERTS certification to the appropriate ranges and determinands is a demonstration of compliance to the applicable standards.

6. Condition 2.3.11 shall be amended to:

2.3.11 The bag filter bypass use shall be minimised and only used when waste is not present in the furnace. Total loss of power shall not cause the bypass to open.

7. Condition 2.5.4 shall be amended to:

2.5.4 Flue gas treatment residues shall not be mixed with the bed ash. Mixing the Flue gas Treatment Residues with any other ash residues from the boiler and/or the electrostatic precipitator shall only be permitted on site provided that the total mixed residues are then treated as Flue Gas Treatment residues and disposed of as Flue Gas Treatment residues.

8. Condition 2.6.2 and Table 2.6.2 shall be amended to:

2.6.2 Wastes produced at the installation shall, as a minimum, be sampled and analysed in accordance with Table 2.6.2. Additional samples shall be taken and tested and appropriate action taken, whenever:

a) disposal or recovery routes change; and

b) it is suspected that the nature or composition of the waste has changed such that the route selected may no longer be appropriate.

Table 2.6.2: Waste Sample and Analysis

Waste Description	Parameter to be measured	Frequency
Bottom Ash	TOC or LOI, Metals (Cd, Tl, Hg, Pb, Cr, Cu, Mn, Ni, As, Co, V, Sb, Zn) and their compounds and the total soluble fraction of these metals, dioxins/ furans and dioxin like PCB's. Sampling and analysis as per Agency ash sampling protocol.	Quarterly (with the exception of the total soluble fraction which shall be sampled and analysed before the use of a new disposal or recycling route).
Boiler and ESP Ash combined	TOC or LOI, Metals (Cd, Tl, Hg, Pb, Cr, Cu, Mn, Ni, As, Co, V, Sb, Zn) and their compounds and the total soluble fraction of these metals, dioxins/ furans and dioxin like PCB's. Sampling and analysis as per Agency ash sampling protocol.	Quarterly (with the exception of the total soluble fraction which shall be sampled and analysed before the use of a new disposal or recycling route).
Flue gas treatment residues	TOC or LOI, Metals (Cd, Tl, Hg, Pb, Cr, Cu, Mn, Ni, As, Co, V, Sb, Zn) and their compounds and the total soluble fraction of these metals, dioxins/ furans and dioxin like PCB's. Sampling and analysis as per Agency ash sampling protocol.	Quarterly (with the exception of the total soluble fraction which shall be sampled and analysed before the use of a new disposal or recycling route).

9. Condition 2.10.6 shall be amended to:

2.10.6 The operator shall make available on the Internet continuous monitoring data within 31 working days of the end of the month in question.

10. Condition 4.1.8 shall be amended to:

4.1.8 The report required by Condition 4.1.7 shall include the following:
a) A review (with regard to BAT) of opportunities for increasing the overall energy efficiency of the Installation over the coming year;
b) Identify progress with those opportunities identified in the previous report; and
c) Identify the net usable energy produced per tonne of waste processed i.e. energy consumption of the Installation and unused energy discharged from cooling operations to be deducted.

11. Condition 5.1.1.5 shall be amended to:

5.1.1.5 any incident which has led to a period of abnormal operation of incineration or co-incineration plant, as defined in section 10.1.1.

12. Condition 5.1.4 shall be amended to:

5.1.4 The Operator shall notify the Agency, as soon as reasonably practicable, of any information concerning the state of the site, which adds to that, provided to the Agency as part of the Application or to that in the Site Protection and Monitoring Programme.

13. Condition 6.1.2 shall be amended to:

6.1.2 The limits for emissions into air for the parameter(s) and emission point(s) set out in Table 6.1.3 shall not be exceeded except under abnormal operating conditions.

14. Condition 6.1.3 and table 6.1.3 shall be amended to:

6.1.3 The Operator shall carry out monitoring of the parameters listed in Table 6.1.3, from the emission points and at least to the frequencies specified in that Table.

Table 6.1.3 : Emission limits to air and monitoring during normal operation

Emission point reference	Parameter	Limit (including Reference Period)[1]	Monitoring frequency	Monitoring method
A1, A2 A3	Particulate matter	30 mg/m^3 ½-hr average	Continuous measurement	BS EN 13284-2 [6 8]
A1, A2 A3	Particulate matter	10 mg/m^3 daily average	Continuous measurement	BS EN 13284-2 [6 8]
A1, A2	Particulate matter	20 mg/m^3	Bi-annual	[BS EN 13284-1] Alternative methods

Table 6.1.3 : Emission limits to air and monitoring during normal operation				
Emission point reference	**Parameter**	**Limit (including Reference Period)**[1]	**Monitoring frequency**	**Monitoring method**
A3		periodic over minimum 1-hour period	Quarterly in the first year of operation	and standards, specified within TGN M2, may be agreed in writing with the Agency if justified
A1, A2 A3	Total Organic Carbon (TOC)	20 mg/m^3 ½-hr average	Continuous measurement	BS EN 12619[6 8]
A1, A2 A3	Total Organic Carbon (TOC)	10 mg/m^3 daily average	Continuous measurement	BS EN 12619[6 8]
A1, A2 A3	Total Organic Carbon (TOC)	20 mg/m^3 periodic over minimum 1-hour period	Bi-annual Quarterly in the first year of operation	BS EN 12619
A1, A2 A3	Hydrogen chloride	60 mg/m^3 ½-hr average	Continuous measurement	MCERTS certified instruments[7 9]
A1, A2 A3	Hydrogen chloride	10 mg/m^3 daily average	Continuous measurement	MCERTS certified instruments[7 9]
A1, A2 A3	Hydrogen chloride	30 mg/m^3 periodic over minimum 1-hour period	Bi-annual Quarterly in the first year of operation	BS EN 1911: Alternative methods and standards, specified within TGN M2, may be agreed in writing with the Agency if justified
A1, A2 A3	Hydrogen fluoride	1 mg/m^3 periodic over minimum 1-hour period	Bi-annual Quarterly in the first year of operation	USEPA Method 26/26A Alternative methods and standards, specified within TGN M2, may be agreed in writing with the Agency if justified
A1, A2 A3	Carbon monoxide	100 mg/m^3 ½-hr average	Continuous measurement	ISO 12039[4 8]
A1, A2 A3	Carbon monoxide	50 mg/m^3 daily average	Continuous measurement	ISO 12039[4 8]

Table 6.1.3 : Emission limits to air and monitoring during normal operation

Emission point reference	Parameter	Limit (including Reference Period)[1]	Monitoring frequency	Monitoring method
A1, A2 A3	Carbon monoxide	100 mg/m^3 periodic over minimum 4 hour period, data to be reported as ½-hour averages	Bi-annual Quarterly in the first year of operation	ISO 12039 Alternative methods and standards, specified within TGN M2, may be agreed in writing with the Agency if justified
A1, A2 A3	Sulphur dioxide	200 mg/m^3 ½-hr average	Continuous measurement	BS 6069-4.4[5 8]
A1, A2 A3	Sulphur dioxide	50 mg/m^3 daily average	Continuous measurement	BS 6069-4.4[5 8]
A1, A2 A3	Sulphur dioxide	200 mg/m^3 periodic over minimum 4 hour period, data to be reported as ½ hour averages	Bi-annual Quarterly in the first year of operation	BS 6069-4.1 Alternative methods and standards, specified within TGN M2, may be agreed in writing with the Agency if justified
A1, A2 A3	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	400 mg/m^3 ½-hr average	Continuous measurement	ISO 10849[5 8]
A1, A2 A3	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	200 mg/m^3 daily average	Continuous measurement	ISO 10849[5 8]
A1, A2 A3	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	400 mg/m^3 periodic over minimum 4 hour period, data to be reported as ½ hour averages	Bi-annual Quarterly in the first year of operation	ISO 10849 or BS ISO 11564 Alternative methods and standards, specified within TGN M2, may be agreed in writing with the Agency if justified
A1, A2 A3	Nitrous Oxide (N_2O)	No limit Set	continuous measurement	As specified in M2

Table 6.1.3 : Emission limits to air and monitoring during normal operation				
Emission point reference	**Parameter**	**Limit (including Reference Period)[1]**	**Monitoring frequency**	**Monitoring method**
			Daily average	
A1, A2 A3	Ammonia (NH_3)	20 mg/m^3 ½-hr average	continuous measurement	As specified in M2
A1, A2 A3	Ammonia (NH_3)	10 mg/m^3 daily average	continuous measurement	As specified in M2
A1, A2 A3 .	Ammonia (NH_3)	20 mg/m^3	Bi-annual Quarterly in the first year of operation	As specified in M2
A1, A2 A3	Cadmium & thallium and their compounds (total) [2]	0.05 mg/m^3 periodic over minimum 30 minute, maximum 8 hour period	Bi-annual Quarterly in the first year of operation	BS EN 14385
A1, A2 A3	Mercury and its compounds [2]	0.05 mg/m^3 periodic over minimum 30 minute, maximum 8 hour period	Bi-annual Quarterly in the first year of operation	BS EN 13211
A1, A2 A3	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total) [2]	0.5 mg/m^3 periodic over minimum 30 minute, maximum 8 hour period	Bi-annual Quarterly in the first year of operation	BS EN 14385
A1, A2 A3	Dioxin-like PCBs (WHO-TEQ [3] Humans / Mammals)	No Limit set	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours. Quarterly in the first year of operation	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)
A1, A2 A3	Dioxin-like PCBs (WHO-TEQ [3] Fish)	No Limit set	Bi-annual periodic measurement, average value over sample period of between 6 and 8	To be determined utilising sampling and analytical techniques developed for

Table 6.1.3 : Emission limits to air and monitoring during normal operation

Emission point reference	Parameter	Limit (including Reference Period)[1]	Monitoring frequency	Monitoring method
			hours. Quarterly in the first year of operation	dioxins/furans (BS EN 1948)
A1, A2 A3	Dioxin-like PCBs (WHO-TEQ[3] Birds)	No Limit set	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours. Quarterly in the first year of operation	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)
A1, A2 A3	individual poly-cyclic aromatic hydrocarbons (PAHs)	No Limit set	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours. Quarterly in the first year of operation	Procedure shall use BS ISO 11338-1 and BS-ISO 11338-2.
A1 A2 A3	Dioxins / furans (WHO-TEQ Humans / Mammals)[3]	No limit set	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours. Quarterly in the first year of operation	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)
A1 A2 A3	Dioxins / furans (WHO-TEQ Fish)[3]	No limit set	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours. Quarterly in the first year of operation	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)
A1 A2 A3	Dioxins / furans (WHO-TEQ Birds)[3]	No limit set	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours. Quarterly in the first year of operation	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)
A1, A2	Dioxins /	0.1 ng/m^3	Bi-annual	BS EN 1948

Table 6.1.3 : Emission limits to air and monitoring during normal operation				
Emission point reference	**Parameter**	**Limit (including Reference Period)**[1]	**Monitoring frequency**	**Monitoring method**
A3	furans (I-TEQ)	periodic over minimum 6 hours, maximum 8 hour period [3]	Quarterly in the first year of operation	

Note 1: See Section 10.1.1 for reference conditions

Note 2: 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 3: The I-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 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 10%. 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 (10%). 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 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 20% in place of 10%.

Note 6: As Note 4, except that the value of the confidence interval is 30% in place of 10%.

Note 7: As Note 4, except that the value of the confidence interval is 40% in place of 10%.

Note 8: MCERTS certification to the appropriate ranges and determinands is a demonstration of compliance to the applicable standards.

Note 9: The certification range for MCERTS equipment should be 1.5 times the daily emission limit value. The CEM shall also be able to measure instantaneous values over the ranges that 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.

15. Condition 6.1.4 shall be amended to:

6.1.4 The half-hourly average values shall be determined within the effective operating time (excluding the start-up and shut- down periods if no waste is being incinerated) from the measured values after having subtracted the value of the confidence interval specified at condition 6.1.5 below. The daily average values shall be determined from those validated average values.

16. Condition 8.1.2 shall be amended to:

8.1.2 By 31 January each year the Operator shall undertake, and report to the Agency, annual audits of the intended waste disposal and treatment sites for the bottom ash, combined boiler and ESP ash, Flue Gas Treatment Residues and other wastes (solid and liquid). The audits are to ensure that the disposal and treatment sites are appropriately licensed to receive the type and quantity of waste generated by the permitted installation. The audit shall also ensure that the recovery sites for ferrous and non-ferrous metals are appropriately licensed to recover the type and quantity of waste generated.

17. Condition 9.1.1 and table 9.1.1 shall be amended to:

9.1.1 The Operator shall complete the requirements specified in Table 9.1.1 by the date specified in that Table, and shall send a report, including written notification of the date of completion of each requirement to the Agency, at the Reporting Address, within 14 days of the completion of each such requirement.

Table 9.1.1: Improvement programme requirements

Reference	Requirement	Date
9.1	A written protocol for representative sampling and analysis for the determination of total organic carbon or loss-on-ignition, composition and leachability of the bed, boiler and flue gas treatment ash shall be submitted to the Agency for approval.	Completed.
9.2	The Operator shall submit a post commissioning report. The report shall include, but not be limited to: • Comparison of process performance against all permit conditions. • Details of the injection of the reagent for the reduction of oxides of nitrogen (including rate(s), control philosophy and nozzle height(s)) to maximise the efficiency and avoid over dosing reagent to minimise the creation of nitrous oxide and ammonia slip. • the results of the commissioning trials (of the SNCR system) and a justification made for the operational reduction limit selected having regard to BAT for the process and what further reductions can be achieved by equipment or process modifications. • Details of the procedures developed during commissioning for demonstrating control of the process. • Details of the location of the temperature sensors in the furnace in order to have the best control of the combustion conditions. • Details of the optimisation of reagent injection to minimise acid gases, dioxins, furans and heavy metals emissions to air. • Details of the automatic triggering of auxillary burners and of the operation of the waste feed	Within 5 months of the handover certificate being completed.

Table 9.1.1: Improvement programme requirements		
Reference	**Requirement**	**Date**
	lockout when the furnace temperature is less than 850 °C.	
9.3	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 to the Agency.	Within 3 months of the handover certificate being completed.
9.4	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 6.1.2 of this Permit. The results shall be submitted to the Agency.	Within 6 months of the handover certificate being completed.
9.5	The Operator shall submit a proposal to the Agency to carry out tests to determine the size distribution of the particulate matter in the exhaust gas emissions to air from emission A1, identifying the fractions within the PM_{10}, $PM_{2.5}$ and $PM_{1.0}$ ranges. The proposal shall include a timetable to carry out such tests and produce a report on the results.	Completed.
9.6	On receipt of written agreement by the Agency to the proposal and the timetable submitted for 9.5, the Operator shall carry out the tests and submit to the Agency a report on the results.	Completed
9.7	The Operator shall calibrate and verify the performance of Continuous Emission Monitors for release points and parameters as specified in Table 6.1.3 (of BR4551) to BS EN 14181 and submit a summary report to the Environment Agency as evidence of compliance with the requirements of BS EN 14181.	Within 3 months of completion of the handover certificate being completed.
9.8	A report shall be sent to the Agency on establishing an Environmental Management System having regard to section 2.1 of the relevant IPPC Sectoral or other Technical Guidance.	Within 12 months of the handover certificate being completed.
9.9	The Operator shall commission and report an air quality assessment to confirm the results of the air dispersion modelling to a specification agreed in writing with the Agency	Within 12 months of the handover certificate being completed.
9.10	The Operator shall review the techniques for continuous measurements 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 the handover certificate being completed.
9.11	The Operator shall carry out tests to determine the profile of polycyclic aromatic hydrocarbons ("PAHs") and their concentrations in the exhaust gas emissions. The results shall be submitted in writing to the Agency.	Within 12 months of the handover certificate being completed.
9.12	The Operator shall compile and maintain a full set of "as built" Piping and Instrumentation Diagrams for the Installation. The P & ID diagrams shall be made available to the Agency upon request.	Within 3 months of the handover certificate being completed.

18. Condition 10.1.1 shall be amended by adding the definition as set out below:

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

19. Schedule 2 shall be amended to:

Schedule 2 Reporting of monitoring data

Parameters for which reports shall be made, in accordance with condition 4.1.2 of this Permit, are listed below.

Notes on Table S2:

1. Metals and their compounds (in total) are to be expressed as the metal.
2. One measurement every 6 months but one every 3 months in first 12 months of operation. Reporting to be every 3 months in the first 12 months then every six months afterwards.
3. One measurement every 6 months but one every 3 months in first 12 months of operation. Reporting to be every 3 months in the first 12 months then every six months afterwards. Average value over sample period of between 6 and 8 hours. Determination in accordance with BS EN 1948.

Table S2: Reporting of Monitoring Data.

Parameter	Emission Point(s)	Frequency	Reporting Period	Reporting Form.
Total Particulate Matter	A1, A2 and A3.	Continuous	Monthly	PMA1-3.
		Periodic Note 3 above.	Note 3 above.	EXT A1-3.
VOCs as Total organic Carbon (TOC)	A1, A2 and A3.	Continuous	Monthly	TOCA1-3.
		Periodic Note 3 above.	Note 3 above.	EXT A1-3.
Hydrogen Chloride	A1, A2 and A3.	Continuous	Monthly	HCLA1-3.
		Periodic Note 3 above.	Note 3 above.	EXT A1-3.
Carbon Monoxide	A1, A2 and A3.	Continuous	Monthly	COA1-3.
		Periodic Note 3 above.	Note 3 above.	EXT A1-3.
Sulphur Dioxide	A1, A2 and A3.	Continuous	Monthly	SOA1-3.
		Periodic Note 3 above.	Note 3 above.	EXT A1-3.
Oxides of Nitrogen (NO and NO2 expressed as NO2)	A1, A2 and A3.	Continuous	Monthly	NOXA1-3.
		Periodic Note 3 above.	Note 3 above.	EXT A1-3.
Ammonia (NH3)	A1, A2 and A3.	Continuous	Monthly	NHA1-3.
		Periodic Note 3 above.	Note 3 above.	EXT A1-3.
Nitrous oxide (N20)	A1, A2 and A3.	Periodic. Note 3 above.	Note 3 above.	EXT A1-3.
Hydrogen Fluoride	A1, A2 and A3.	Periodic Note 3 above.	Note 3 above.	EXT A1-3.
Cadmium and Thallium and their compounds (total)	A1, A2 and A3.	Periodic Note 3 above.	Note 3 above.	EXT A1-3.
Mercury and its compounds (total)	A1, A2 and A3.	Periodic Note 3 above.	Note 3 above	EXT A1-3.
Poly-cyclic aromatic hydrocarbons	A1, A2 and A3.	Periodic Note 3 above.	Note 3 above	EXT A1-3.

Table S2: Reporting of Monitoring Data.					
Parameter		**Emission Point(s)**	**Frequency**	**Reporting Period**	**Reporting Form.**
PAHs					
Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V and their compounds (total).		A1, A2 and A3.	Periodic Note 3 above.	Note 3 above.	EXT A1-3.
Dioxins and Furans	I-TEQ	A1, A2 and A3.	Note 3 above. Periodic Note 4 above.	Note 4 above.	EXT A1-3.
	WHO-TEQ Humans/mammals				
	WHO TEQ Birds				
	WHO TEQ Fish				
Dioxin Like PCBs.	WHO-TEQ Humans/mammals	A1, A2 and A3.	Periodic Note 4 above.	Note 4 above.	EXT A1-3.
	WHO TEQ Fish				
	WHO TEQ Birds				
TOC or LOI, metals (Cd, Tl, Hg, Pb, Cr, Cu, Mn, Ni, As, Co, V, Sb, Zn) and their compounds Note 2 and dioxins/furans and dioxin like PCBs.		Furnace Bottom Ash	Note 3 above.	Every 3 months during the first 12 months of operation and then every 6 months	Ash1.
TOC or LOI, metals (Cd, Tl, Hg, Pb, Cr, Cu, Mn, Ni, As, Co, V, Sb, Zn) and their compounds Note 2 and dioxins/furans and dioxin like PCBs.		Boiler Ash and Electrostatic Precipitator Ash.	Note 3 above.	Every 3 months during the first 12 months of operation and then every six months.	Ash1.
TOC or LOI, metals (Cd, Tl, Hg, Pb, Cr, Cu, Mn, Ni, As, Co, V, Sb, Zn) and their compounds Note 2 and dioxins/furans and dioxin like PCBs.		Flue Gas Treatment Residue.	Note 3 above.	Every 3 months during the first 12 months of operation and then every six months.	Ash1.
Total soluble fraction and metals (Cd, Tl, Hg, Pb, Cr, Cu, Mn, Ni, As, Co, V, Sb, Zn) soluble fractions		Furnace Bottom Ash	Whenever the disposal or recycling route changes	Before use of a new disposal or recycling route	Ash2
Total soluble fraction and metals (Cd, Tl, Hg, Pb, Cr, Cu, Mn, Ni, As, Co, V, Sb, Zn) soluble fractions		Boiler Ash and Electrostatic Precipitator Ash.	Whenever the disposal or recycling route changes	Before use of a new disposal or recycling route	Ash2
Total soluble fraction and metals (Cd, Tl, Hg, Pb, Cr, Cu, Mn, Ni, As, Co, V, Sb, Zn) soluble fractions		Flue Gas Treatment Residue.	Whenever the disposal or recycling route changes	Before use of a new disposal or recycling route	Ash2
Waste throughput (tonnage)		Not a release.	Each delivery.	Annual.	PI1
Bottom ash. (tonnage)		From Incineration Lines 1-3.	Every 3 months during the first 12 months of operation and then	Annual.	PI1

Table S2: Reporting of Monitoring Data.				
Parameter	**Emission Point(s)**	**Frequency**	**Reporting Period**	**Reporting Form.**
		every six months.		
Combined boiler and ESP ash (tonnage)	From incineration lines 1-3.	Every 3 months during the first 12 months of operation and then every six months.	Annual.	PI1
Flue Gas Treatment Residues (tonnage).	From Incineration Lines 1-3.	Every 3 months during the first 12 months of operation and then every six months.	Annual.	PI1
Waste Disposal and recovery	From site	Annually	1 January	R1
Water usage	From site	Annually	1 January	WU1
Energy usage	From site	Annually	1 January	E1

20. Schedule 3 shall be amended to:

Schedule 3 - Forms to be used

Table S3: Reporting Forms		
Media or parameter	**Form Number**	**Date of Form**
Air	EXTA1-3, PMA1-3, TOCA1-3, HCLA1-3, NHA1-3, COA1-3, SOA1-3, NOXA1-3	20.03.2007
Energy	E1	20.03.2007 ✓
Water usage	WU1	20.03.2007 ✓
Waste Return	R1	20.03.2007 ✓
LOI, %C and metals in bottom ash and APC residues	Ash 1	20.03.2007
Ash solubility	Ash 2	20.03.2007 ✓
Performance indicators	PI1	20.03.2007 ✓

Or such other forms as may be agreed in writing with the Environment Agency.

SCHEDULE C - CONDITIONS TO BE ADDED

21. Condition 2.3.12 shall be added:

2.3.12 Any operation of the furnace pressure relief valve shall be reported to the Agency in the Schedule 1 release format attached to this permit.