Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

Granox Limited

Granox Limited
Desoto Road
West Bank Dock Estate
Widnes
Cheshire
WA8 0PB

Variation application number
EPR/CP3230BE/V010

Permit number
EPR/CP3230BE

Granox Limited
Permit number EPR/CP3230BE

Introductory note

This introductory note does not form a part of the notice

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

The changes introduced by this variation notice are as follows:

- installation of a temporary 25-metre high stack and connecting duct for “Stream A” flue gas from the Fluidised Bed Combustors
- amendment of the existing emission point A6 (now A6b) and addition of a new emission point A6a at the temporary stack

The schedules specify the changes made to the original permit.

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

Status log of the permit		
Description	**Date**	**Comments**
Original application CP3230BE - Issued	Issued 04/11/05	EPR/CP3230BE/A001
Variation MP3637LT	Issued 17/08/06	EPR/CP3230BE/V002
Variation EP3738UN	Issued 02/05/07	EPR/CP3230BE/V003
Variation YP3836UK	Issued 10/08/07	EPR/CP3230BE/V004
Variation YP3033XZ	Issued 09/11/07	EPR/CP3230BE/V005
Variation PP3236XN	Issued 16/05/08	EPR/CP3230BE/V006
Variation PP3736GG	Issued 05/05/09	EPR/CP3230BE/V007
Variation JP3630GF	Withdrawn	EPR/CP3230BE/V008
Administrative Variation EPR/CP3230BE/V009	Received 14/01/10	
Administrative Variation EPR/CP3230BE/V009	Issued 12/02/10	
Application EPR/CP3230BE/V010	Duly made 23/10/12	Application to vary the permit.
Variation determined EPR/CP3230BE	19/12/12	Varied permit issued.

End of introductory note

Notice of variation

Environmental Permitting (England and Wales) Regulations 2010

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

Permit number
EPR/CP3230BE

issued to:
Granox Limited ("the operator")

whose registered office is

Granox Limited
Ings Road
Doncaster
South Yorkshire
DN5 9SW

company registration number 00457634

to operate a regulated facility at

Granox Limited
Desoto Road
West Bank Dock Estate
Widnes
Cheshire
WA8 0PB

to the extent set out in the schedules.

The notice shall take effect from 19/12/12**.**

Name	Date
Helen Smith	**19/12/2012**

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

None

Schedule 2 – conditions to be amended

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

- "*Condition 2.1.1*" and "*Table 2.1.1"* are amended to include additional information received as a result of the current variation application and now reads as follows:

2.1.1 The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 2.1.1, or as otherwise agreed in writing by the Agency in accordance with conditions 1.5.1 and 1.5.2 of this Permit.

Table 2.1.1: Operating techniques

Description	Parts	Date Received
Application	The response to questions 2.1, 2.2 and 2.5 of the Application Form given in pages 3 to 67 and 87 to 92 (inclusive) of the Application, excluding section 2.2.2.4 on page 59. Excluding all references to site domestic sewage storage, treatment and discharge to the River Mersey.	17/09/04
Additional information received in the 'Application for a variation to comply with WID'.	The response to sections C2.1, C2.2, C2.6 and C2.10 for the Fluidised Bed Combustors (ST-A, ST-B), Boilers (B1, B2, B3, B4, B6) and the Compression Ignition Engines (E-A, E-B).	30/03/05
Additional information received in (part) response to a Schedule 4 Notice.	The response to questions 1, 2, 3, 6, 7 and 8, including the information received in relation to the combustion of gas oil, excluding reference to the use of heavy fuel oil or recovered vegetable oil.	28/06/05
Additional information received in (part) response to a Schedule 4 Notice.	The response to questions 3, 4, 5, 9 and 10	03/08/05
Application for variation to burn vegetable oil and the additional information	The whole of the application	31/03/06 18/04/06 02/08/06
Application for variation to destroy perfluorooctane sulphonate in the FBC	The whole of the application	03/08/06
Application for variation for the addition of waste soap, waste glycerine and Hedco leachate to the list of permitted waste	The whole of the application	12/04/07
Application for variation for the addition of leather waste and waste protocol	The whole of the application as amended by the revised documents dated 2 August 2007 and the revised spreadsheet submitted 31 July 2007.	23/07/07
Variation application EPR/CP3230BE/V010	Air quality assessment, Supporting Information VA6 – Non technical summary, sampling locations, energy saving, monitoring	23/10/12

- "*Condition 2.2.1.2*" and *"Table 2.2.1"* are amended to re-name the existing emission point (A6) to become A6b and include an additional emission point A6a to represent the temporary stack and now reads as follows:

2.2.1.2 Emissions to air from the emission points in Table 2.2.1 shall only arise from the sources specified in that Table.

Table 2.2.1: Emission points to air

Emission point reference or description	Source	Location of emission point
A1	Boiler 1 (WID Application reference: B1)	Drawing entitled 'Emissions to Air' (Reference number 9)
A2	Boiler 2 (WID Application reference: B2)	Drawing entitled 'Emissions to Air' (Reference number 9)
A3	Boiler 3 (WID Application reference: B3)	Drawing entitled 'Emissions to Air' (Reference number 8)
A4	Boiler 4 (WID Application reference: B4)	Drawing entitled 'Emissions to Air' (Reference number 7)
A5	Boiler 6 (WID Application reference: B6)	Drawing entitled 'Emissions to Air' (Reference number 6)
A6a (Temporary stack)	Fluidised Bed Combustors A and B - Stream A (WID Application reference: ST-A and ST-B)	Drawing entitled 'Emissions to Air' (Located at eastern corner of 'Empire' building)
A6b (Existing stack)	Fluidised Bed Combustors A and B – Stream B (WID Application reference: ST-A and ST-B)	Drawing entitled 'Emissions to Air' (Located at eastern corner of 'Empire' building)
A7	Compression Ignition Engines A and B (WID Application reference: E-A and E-B)	Drawing entitled 'Emissions to Air' (Reference number 10)
A8	Scrubber 1 (Rendering Plant 1 odour abatement scrubber)	Drawing entitled 'Emissions to Air' (Reference number 2)
A9	Scrubber 2 (Rendering Plant 2 odour abatement scrubber)	Drawing entitled 'Emissions to Air' (Reference number 1)
A10	Scrubber 3 (Rendering Plant 3 odour abatement scrubber)	Drawing entitled 'Emissions to Air' (Reference number 4)
A11	Blood Plant Scrubber (Blood Plant odour abatement scrubber)	Drawing entitled 'Emissions to Air' (Reference number 3)

- "*Condition 2.2.1.3*" and *"Table 2.2.2"* are amended to include air emissions monitoring requirements for the temporary stack A6a and now reads as follows:

2.2.1.3 The limits for emissions to air for the parameters and emission points set out in Table 2.2.2 shall not be exceeded except during a period of abnormal operation.

Table 2.2.2: Emission limits to air and monitoring

Emission point reference[12]	Parameter	Limit (including Reference Period)[1]	Monitoring frequency	Monitoring method
A8	Odour	3000 OU_E (1hr average, 98th percentile)	Biannual	BS EN 13725, CEN Olfactometry Standard
A9	Odour	3000 OU_E (1hr average, 98th percentile)	Bi-annual	BS EN 13725, CEN Olfactometry Standard
A10	Odour	3000 OU_E (1hr average, 98th percentile)	Bi-annual	BS EN 13725, CEN Olfactometry Standard
A11	Odour	3000 OU_E (1hr average, 98th percentile)	Bi-annual	BS EN 13725, CEN Olfactometry Standard
A6a, A6b	Particulate matter	25 mg/m^3 until 27th December 2005 daily average	Continuous measurement	BS EN 13284-2 [6 8]
A1, A2, A3, A4, A5, A6a, A6b and A7	Particulate matter	10 mg/m^3 from 28th December 2005 [11] daily average	Continuous measurement	BS EN 13284-2 [6 8]
A1, A2, A3, A4, A5, A6a, A6b and A7	Particulate matter	30 mg/m^3 from 28th December 2005 [11] ½ - hour average	Continuous measurement	BS EN 13284-2 [6 8]
A1, A2, A3, A4, A5, A6a, A6b and A7	Particulate matter	20 mg/m^3 from 28th December 2005 [11] periodic over minimum 1-hour period	Bi-annual	BS EN 13284-1
A1, A2, A3, A4, A5, A6a, A6b and A7	Total Organic Carbon (TOC)	10 mg/m^3 from 28th December 2005 [11] daily average	Continuous measurement	BS EN 12619 [6 8]
A1, A2, A3, A4, A5, A6a, A6b and A7	Total Organic Carbon (TOC)	20 mg/m^3 from 28th December 2005 [11] ½ - hour average	Continuous measurement	BS EN 12619 [6 8]

Table 2.2.2: Emission limits to air and monitoring				
Emission point reference[12]	**Parameter**	**Limit (including Reference Period)[1]**	**Monitoring frequency**	**Monitoring method**
A1, A2, A3, A4, A5, A6a, A6b and A7	Total Organic Carbon (TOC)	20 mg/m^3 from 28th December 2005 [11] periodic over minimum 1-hour period	Bi-annual	BS EN 12619
A6a, A6b	Hydrogen chloride	30 mg/m^3 until 27th December 2005 daily average	Continuous measurement	MCERTS certified instruments [7 9]
A6a, A6b	Hydrogen chloride	10 mg/m^3 from 28th December 2005 daily average	Continuous measurement	MCERTS certified instruments [7 9]
A6a, A6b	Hydrogen chloride	60 mg/m^3 from 28th December 2005 ½ - hour average	Continuous measurement	MCERTS certified instruments [7 9]
A1, A2, A3, A4, A5, A6a, A6b and A7	Hydrogen chloride	30 mg/m^3 from 28th December 2005 [11] periodic over minimum 1-hour period	Bi-annual	BS EN 1911
A1, A2, A3, A4, A5, A6a, A6b and A7	Hydrogen fluoride	2 mg/m^3 from 28th December 2005 [11] periodic over minimum 1-hour period	Bi-annual	USEPA Method 26/26A
A1, A2, A3, A4, A5 and A7	Carbon monoxide	50 mg/m^3 from 28th December 2005 [11] daily average	Continuous measurement	ISO 12039 [4 8]
A1, A2, A3, A4, A5 and A7	Carbon monoxide	100 mg/m^3 from 28th December 2005 [11] ½ - hour average	Continuous measurement	ISO 12039 [4 8]
A6a, A6b	Carbon monoxide	100 mg/m^3 daily average	Continuous measurement	ISO 12039 [4 8]
A6a, A6b	Carbon monoxide	100 mg/m^3 from 28th December 2005 [11] hourly average	Continuous measurement	ISO 12039 [4 8]

Table 2.2.2: Emission limits to air and monitoring				
Emission point reference[12]	**Parameter**	**Limit (including Reference Period)[1]**	**Monitoring frequency**	**Monitoring method**
A1, A2, A3, A4, A5, A6a, A6b and A7	Carbon monoxide	100 mg/m^3 from 28th December 2005 [11] periodic over minimum 4 hour period, data to be reported as ½-hour averages	Bi-annual	ISO 12039
A6a, A6b	Sulphur dioxide	50 mg/m^3 daily average	Continuous measurement	BS 6069-4.4 [5 8]
A6a, A6b	Sulphur dioxide	200 mg/m^3 ½ - hour average	Continuous measurement	BS 6069-4.4 [5 8]
A1, A2, A3, A4, A5, A6a, A6b and A7	Sulphur dioxide	200 mg/m^3 from 28th December 2005 [11] periodic over minimum 4 hour period, data to be reported as ½ hour averages	Bi-annual	BS 6069-4.1
A6a, A6b	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	300 mg/m^3 until 27th December 2005 daily average	Continuous measurement	ISO 10849 [5 8]
A6a, A6b	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	200 mg/m^3 from 28th December 2005 [11] daily average	Continuous measurement	ISO 10849 [5 8]
A6a, A6b	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	400 mg/m^3 from 28th December 2005 [11] ½ - hour average	Continuous measurement	ISO 10849[5 8]
A1, A2, A3, A4, A5 and A7	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	400 mg/m^3 from 28th December 2005 [11] daily average	Continuous measurement	ISO 10849 [5 8]
A1, A2, A3, A4, A5 and A7	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	800 mg/m^3 from 28th December 2005 [11] ½ - hour average	Continuous measurement	ISO 10849 [5 8]

Table 2.2.2: Emission limits to air and monitoring				
Emission point reference[12]	**Parameter**	**Limit (including Reference Period)[1]**	**Monitoring frequency**	**Monitoring method**
A6a, A6b	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	400 mg/m^3 from 28th December 2005 [11] periodic over minimum 4 hour period, data to be reported as ½- hour averages	Bi-annual	ISO 10849 or BS ISO 11564
A1, A2, A3, A4, A5 and A7	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	400 mg/m^3 from 28th December 2005 [11] periodic over minimum 4 hour period, data to be reported as ½ hour averages	Bi-annual	ISO 10849 or BS ISO 11564
A1, A2, A3, A4, A5, A6a, A6b and A7	Cadmium & thallium and their compounds (total) [2]	0.05 mg/m^3 from 28th December 2005 [11] periodic over minimum 30 minute, maximum 8 hour period	Bi-annual	BS EN 14385
A1, A2, A3, A4, A5, A6a, A6b and A7	Mercury and its compounds [2]	0.05 mg/m^3 from 28th December 2005 [11] periodic over minimum 30 minute, maximum 8 hour period	Bi-annual	BS EN 13211
A1, A2, A3, A4, A5, A6a, A6b and A7	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total) [2]	0.5 mg/m^3 from 28th December 2005 [11] periodic over minimum 30 minute, maximum 8 hour period	Bi-annual	BS EN 14385
A1, A2, A3, A4, A5, A6a, A6b and A7	Dioxins / furans (I-TEQ)	0.1 ng/m^3 from 28th December 2005 [11] periodic over minimum 6 hours, maximum 8 hour period [3]	Bi-annual [10]	BS EN 1948

Table 2.2.2: Emission limits to air and monitoring				
Emission point reference[12]	**Parameter**	**Limit (including Reference Period)[1]**	**Monitoring frequency**	**Monitoring method**
A6a, A6b	Dioxins / furans (I-TEQ)	1.0 ng/m^3 until 27th December 2005 periodic over minimum 6 hours, maximum 8 hour period [3]	Bi-annual	BS EN 1948

Note 1: See Section 6 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.

Note 10: At least one monitoring result should be reported by 31/03/06.

Note 11: Emission limit only applies from 28/12/05 to streams burning waste. For any streams that cease burning waste, the emission limits for the parameters listed shall revert to the limits (if any) in place on the 27th December 2005.

Note 12: The limits in this table apply to each referenced emission point individually.

- *"Condition 2.10.4"* and "*Table 2.10.1"* are amended to include other air emissions monitoring requirements for the temporary stack A6a and now reads as follows:

2.10.4 The Operator shall carry out environmental or other specified substance monitoring to the frequencies and methods described in Table 2.10.1.

Table 2.10.1: Other monitoring requirements

Emission point reference or source or description of point of measurement	Substance or parameter	Monitoring frequency	Monitoring method [2]	Other specifications
Sampling Points A1, A2, A3, A4, A5, A6a, A6b and A7	Oxygen content	Continuous	ISO 12039	
Sampling Points A1, A2, A3, A4, A5, A6a, A6b and A7	Pressure	Continuous	MCERTS Performance Standards for CEMs	
Sampling Points A1, A2, A3, A4, A5, A6a, A6b and A7	Temperature	Continuous	MCERTS Performance Standards for CEMs	
Sampling Points A1, A2, A3, A4, A5, A6a, A6b and A7	Water vapour content	Continuous	MCERTS Performance Standards for CEMs	
Sampling Points A1, A2, A3, A4, A5, A6a, A6b and A7	Dioxin-like PCBs (WHO-TEQ [1] Humans / Mammals)	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours.	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)	
Sampling Points A1, A2, A3, A4, A5, A6a, A6b and A7	Dioxin-like PCBs (WHO-TEQ [1] Fish)	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours.	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)	
Sampling Points A1, A2, A3, A4, A5, A6a, A6b and A7	Dioxin-like PCBs (WHO-TEQ [1] Birds)	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours.	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)	

Table 2.10.1: Other monitoring requirements				
Emission point reference or source or description of point of measurement	**Substance or parameter**	**Monitoring frequency**	**Monitoring method [2]**	**Other specifications**
Sampling Points A1, A2, A3, A4, A5, A6a, A6b and A7	Poly-cyclic aromatic hydrocarbons (PAHs)	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours.	Procedure shall use BS ISO 11338-1 and BS-ISO11338-2.	
Sampling Points A1, A2, A3, A4, A5, A6a, A6b and A7	Dioxins / furans (WHO-TEQ Humans / Mammals) [1]	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours.	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)	
Sampling Points A1, A2, A3, A4, A5, A6a, A6b and A7	Dioxins / furans (WHO-TEQ Fish) [1]	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours.	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)	
Sampling Points A1, A2, A3, A4, A5, A6a, A6b and A7	Dioxins / furans (WHO-TEQ Birds) [1]	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours.	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)	
Bottom Ash (ST-A, ST-B)	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	Bi-annual	Sampling and analysis as per Agency ash sampling protocol.	
Bottom Ash (ST-A, ST-B)	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.	
Bottom Ash (ST-A, ST-B)	Protein	Bi-annual	Sampling and analysis as per Agency ash sampling protocol.	

Table 2.10.1: Other monitoring requirements				
Emission point reference or source or description of point of measurement	**Substance or parameter**	**Monitoring frequency**	**Monitoring method [2]**	**Other specifications**
APC Residues (ST-A, ST-B)	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.	
Close to the Combustion Chamber inner wall (ST-A, ST-B)	Temperature (°C)	Continuous	MCERTS Performance Standards for CEMs	Traceable to National Standards
W1	Effluent discharge flow (m^3)	Daily	SCA Estimation of Flow and Load ISBN 011752364X	

Note 1: The 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 2: Monitoring methods may be subject to change, and can be changed by prior agreement in writing from the Environment Agency.

- *"Table S2"* is amended to include air emissions reporting requirements for the temporary stack A6a and now reads as follows:

Table S2: Reporting of monitoring data

Parameter	Emission point (Note 2)	Reporting period	Period begins
Sulphur dioxide mg/m^3	A1, A2, A3, A4, A5, A6a, A6b, A7	Bi-annual	01/01/13
Total Organic Carbon (TOC) mg/m^3	A1, A2, A3, A4, A5, A6a, A6b, A7	Bi-annual	01/01/13
Oxides of nitrogen mg/m^3	A1, A2, A3, A4, A5, A6a, A6b, A7	Bi-annual	01/01/13
Gaseous chlorides as HCl mg/m^3	A1, A2, A3, A4, A5, A6a, A6b, A7	Bi-annual	01/01/13
Gaseous fluorides as HF mg/m^3	A1, A2, A3, A4, A5, A7	Bi-annual	01/01/13
Particulate Matter mg/m^3	A1, A2, A3, A4, A5, A6a, A6b, A7	Bi-annual	01/01/13
Carbon Monoxide mg/m^3	A1, A2, A3, A4, A5, A6a, A6b, A7	Bi-annual	01/01/13
Cadmium & Thallium and their compounds (total)	A1, A2, A3, A4, A5, A6a, A6b, A7	Bi-annual	01/01/13
Mercury and its compounds	A1, A2, A3, A4, A5, A6a, A6b, A7	Bi-annual	01/01/13
Antimony, Arsenic, Lead, Chromium, Cobalt, Copper, Manganese, Nickel and Vanadium and their compounds (total)	A1, A2, A3, A4, A5, A6a, A6b, A7	Bi-annual	01/01/13
Dioxins / furans (I-TEQ)	A1, A2, A3, A4, A5, A6a, A6b, A7	Bi-annual	01/01/13
Poly-cyclic aromatic hydrocarbons (PAHs)	A1, A2, A3, A4, A5, A6a, A6b, A7	Bi-annual	01/01/13
Temperature	A1, A2, A3, A4, A5, A6a, A6b, A7	As requested by Agency site inspector. Note 1	01/01/13
Pressure	A1, A2, A3, A4, A5, A6a, A6b, A7	As requested by Agency site inspector. Note 1	01/01/13
Oxygen content	A1, A2, A3, A4, A5, A6a, A6b, A7	As requested by Agency site inspector. Note 1	01/01/13
Water vapour content (unless gas is dried before analysis of emissions)	A1, A2, A3, A4, A5, A6a, A6b, A7	As requested by Agency site inspector. Note 1	01/01/13

Furnace Chamber Temperature	ST-A, ST-B	As requested by Agency site inspector. Note 1	01/01/13
Wind Speed and Direction	Site	As requested by Agency site inspector. Note 1	01/01/13
Metals (Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	Bottom Ash ST-A, ST-B	Bi-annual	01/01/13
Total soluble fraction and metals (Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	Bottom Ash ST-A, ST-B	Before use of a new disposal or recycling route	01/01/13
TOC	Bottom Ash ST-A, ST-B	Bi-annual	01/01/13
LOI	Bottom Ash ST-A, ST-B	Bi-annual	01/01/13
Protein	Bottom Ash ST-A, ST-B	Bi-annual	01/01/13
Metals (Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	APC Residues ST-A, ST-B	Bi-annual	01/01/13
Total soluble fraction and metals (Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	APC Residues ST-A, ST-B	Before use of a new disposal or recycling route	01/01/13
Ammonia mg/l	W1	Bi-annual	01/01/13
Biochemical oxygen demand mg/l	W1	Bi-annual	01/01/13
Total suspended solids mg/l	W1	Bi-annual	01/01/13
pH	W1	Bi-annual	01/01/13
Temperature °C	W1	Bi-annual	01/01/13
Odour (OU)	A8, A9, A10, A11	Bi-annual	01/01/13
Effluent discharge flow m^3	W1	Bi-annual	01/01/13

Water usage	Permitted Installation	Bi-annual	01/01/13
Energy usage	Permitted Installation	Bi-annual	01/01/13
Waste disposal and/or recovery.	Permitted Installation	Bi-annual	01/01/13
Performance indicators	Permitted Installation	Bi-annual	01/01/13

Note 1: These parameters do not normally require to be reported, but shall be available for inspection at the site. Only where there is an operational need for a report to be made should one be required.

Note 2: Permanent access is not required for emission points A1, A2, A3, A4, A5, A8, A9, A10 and A11.

Schedule 3 – conditions to be added

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

- *"Condition 1.4.1 and Table 1.4.1 Improvement programme*" have been amended to add the requirement for the Operator to install a flame ionisation detector to monitor volatile organic compounds from Stream A (temporary stack A6a) and now reads as follows:

1.4.1 The Operator shall complete the improvements specified in Table 1.4.1 by the date specified in that table, and shall send written notification of the date of completion of each requirement to the Agency within 14 days of the completion of each such requirement.

Table 1.4.1: Improvement programme

Reference	Requirement	Date
IC1	The Operator shall install and commission a flame ionisation detector to continuously monitor Volatile Organic Compounds (VOCs) from the Fluidised Bed Combustors (Stream A) discharged through emission point A6a in order to meet the terms of conditions 2.2.1.3, 2.10.4 and 2.10.5 of this permit.	31/03/13