Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2007

The CSWDC Waste to Energy Plant

The Coventry & Solihull Waste
Disposal Company Ltd
Bar Road
Coventry
West Midlands
CV3 4AN

Variation notice number
EPR/NP3739PD/V003

Permit number
NP3739PD

The CSWDC Waste to Energy Plant
Permit Number NP3739PD

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.

In order to improve control over emissions of carbon monoxide by raising the operating concentration of oxygen in the furnaces whilst retaining good control over the emission of oxides of nitrogen the Operator is permitted to use a selective non-catalytic reduction (SNCR) technique. This involves the injection into the furnaces of aqueous ammonia which converts the oxides of nitrogen into nitrogen itself and water. The process will be controlled so that insignificant quantities of unreacted ammonia are released to atmosphere and a monitoring condition has been inserted to ensure this. This variation notice also permits the replacement of the demineralised water plant, which supplies purified water to the boilers, by a reverse osmosis (RO) plant to fulfil the same function. Acting on safety advice from the manufacturers of the incinerator ash discharging equipment the Operator has applied to re-route the air extracted from the discharger vent hoods so that it is emitted to atmosphere outside of the building. Currently this air is fed into the incinerator primary air duct but it is believed that in certain circumstances this could lead to a risk of explosion. This alteration is permitted. Finally this opportunity has been taken to review the data reporting conditions within the permit and make minor alterations where there are inconsistencies.

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 NP3739PD	Received 18/03/2005	
Response to request for information	Request dated 10/05/ 2005	Response dated 08/07/2005
Response to request for further information	E mailed request dated 09/09/2005	Response dated 20/09/2005
Permit determined	20/12/2005	
Variation MP3338UN	29/03/2007	Determined 18/04/2007
Application EPR/NP3739PD/V003	Received 27/03/2009	
Variation EPR/NP3739PD/V003	Determined 01/09/2009	

End of Introductory Note

Notice of variation

Environmental Permitting
(England and Wales) Regulations 2007

Permit number
NP3739PD

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.

The Coventry & Solihull Waste Disposal Company Ltd. ("the operator"),

whose registered office is

Bar Road

Coventry

West Midlands

CV3 4AN

company registration number **2690488**

holds a permit to operate a regulated facility at

The CSWDC Waste to Energy Plant

Bar Road

Coventry,

West Midlands

CV3 4AN

and that permit is varied to the extent set out in Schedules 1 to 3 of this notice.

The notice shall take effect from 1st September 2009

Name	Date
Dr D G Othen	1.9.09

Authorised on behalf of the Agency

Schedule 1 – conditions to be deleted

None

Schedule 2 – conditions to be amended

The following conditions are amended 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 B2.1, B2.2, B2.7 and B2.10 given in section 4, 5, 10 and 13 respectively of the Application.	18/03/2005
Response to Schedule 4 notice	Responses to questions 4 to 17,24 and 25 and 28 to 35 E mailed further responses to questions 29 and 32.	11/07/2005 20/09/2005
Application for Variation EPR/NP3739PD/V003	Application.doc Sections 1 and 2 and Appendix D.	27/03/2009

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. During a period of abnormal operation, the limits for emissions to air for the parameters and emission points set out in Table 2.2.2 (a) shall not be exceeded.

Table 2.2.2 : 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/m³ ½-hr average	Continuous measurement	BS EN 13284-2 [6; 8]
A1, A2, A3	Particulate matter	10 mg/m³ daily average	Continuous measurement	BS EN 13284-2 [6; 8]
A1, A2, A3	Particulate matter	30 mg/m³ periodic over minimum 1-hour period	Bi-annual	BS EN 13284-1
A1, A2, A3	Total Organic Carbon (TOC)	20 mg/m³ ½-hr average	Continuous measurement	BS EN 12619 [6; 8]
A1, A2, A3	Total Organic Carbon (TOC)	10 mg/m³ daily average	Continuous measurement	BS EN 12619 [6; 8]

A1, A2, A3	Total Organic Carbon (TOC)	20 mg/m³ periodic over minimum 1-hour period	Bi-annual	BS EN 12619
A1, A2, A3	Hydrogen chloride	60 mg/m³ ½-hr average	Continuous measurement	MCERTS certified instruments [7; 9]
A1, A2, A3	Hydrogen chloride	10 mg/m³ daily average	Continuous measurement	MCERTS certified instruments [7; 9]
A1, A2, A3	Hydrogen chloride	60 mg/m³ periodic over minimum 1-hour period	Bi-annual	BS EN 1911
A1, A2, A3	Hydrogen fluoride	2 mg/m³ periodic over minimum 1-hour period	Bi-annual	USEPA Method 26/26A
A1, A2, A3	Carbon monoxide	100 mg/m³ ½-hr average	Continuous measurement	ISO 12039 [4; 8]
A1, A2, A3	Carbon monoxide	50 mg/m³ daily average	Continuous measurement	ISO 12039 [4; 8]
A1, A2, A3	Carbon monoxide	100 mg/m³ periodic over minimum 4-hour period.	Bi-annual	ISO 12039
A1, A2, A3	Sulphur dioxide	200 mg/m³ ½-hour average	Continuous measurement	BS 6069-4.4 [5; 8]
A1, A2, A3	Sulphur dioxide	50 mg/m³ daily average	Continuous measurement	BS 6069-4.4 [5; 8]
A1, A2, A3	Sulphur dioxide	200 mg/m³ periodic over minimum 4 hour period	Bi-annual	BS 6069-4.1
A1, A2, A3	Oxides of nitrogen (NO and NO_2 expressed as NO_2) [10]	400 mg/m³ ½-hour average	Continuous measurement	ISO 10849 [5; 8]
A1, A2, A3	Oxides of nitrogen (NO and NO_2 expressed as NO_2) [10]	200 mg/m³ daily average	Continuous measurement	ISO 10849 [5; 8]
A1, A2, A3	Oxides of nitrogen (NO and NO_2 expressed as NO_2) [10]	400 mg/m³ periodic over minimum 4 hour period.	Bi-annual	ISO 10849 or BS ISO 11564
A1, A2, A3	Ammonia	30 mg/m³ ½-hour average	Continuous measurement	FTIR
A1, A2, A3	Ammonia	10 mg/m³ Daily average	Continuous measurement	FTIR

A1, A2, A3	Ammonia	30 mg/m^3 periodic over minimum 4 hour period	Bi-annual	See Guidance Note 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	Quarterly	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	Quarterly	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	Quarterly.	BS EN 14385
A1, A2, A3	Dioxins / furans (I-TEQ)	0.1 ng/m^3 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 8 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: Measurement of NO followed by multiplication by 1.05 can be substituted for measurement of all oxides of nitrogen.

Table 2.6.1 shall be amended as follows:

Table 2.6.1 : Emission limits and monitoring frequency for solid residues

Emission point reference	Substance	Limit (including Reference Period)	Monitoring frequency	Monitoring method
Bottom Ash	Loss on Ignition (LOI)	5%	Quarterly – separate samples from each line 1, 2 and 3.	Agency ash sampling protocol.

Schedule 2 Table S2 shall be amended as follows:

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins*
Sulphur dioxide mg m^{-3}	A1, A2, A3	Every 6 months	01/01/2006
Total organic carbon (TOC) mg m^{-3}	A1, A2, A3	Every 6 months	01/01/2006
Oxides of nitrogen (NO and NO_2 expressed as NO_2) mg m^{-3}	A1, A2, A3	Every 6 months	01/01/2006
Hydrogen chloride as HCl mg m^{-3}	A1, A2, A3	Every 6 months	01/01/2006
Hydrogen fluoride as HF mg m^{-3}	A1, A2, A3	Every 6 months	01/01/2006
Particulate matter mg m^{-3}	A1, A2, A3	Every 6 months	01/01/2006
Ammonia mg m^{-3}	A1, A2, A3	Every 6 months	01/07/2009
Cadmium & thallium and their compounds (total) mg m^{-3}	A1, A2, A3	Every 6 months	01/01/2006
Mercury and its compounds mg m^{-3}	A1, A2, A3	Every 6months	01/01/2006
Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V	A1, A2, A3	Every 6 months	01/01/2006

Table S2: Reporting of monitoring data			
Parameter	**Emission point**	**Reporting period**	**Period begins***
and their compounds (total) mg m^{-3}			
Dioxins / furans (I-TEQ) ng m^{-3}	A1, A2, A3	Every 6 months	01/01/2006
Carbon monoxide mg m^{-3}	A1, A2, A3	Every 6 months	01/01/2006
Flow m^3/month	S1,S2,S3,S4,S5	Every 6 months	01/01/2006
pH	S1	Every 6 months	01/01/2006
Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	A1, A2, A3	Every 6 months	01/01/2006
Dioxin-like PCBs (WHO-TEQ Fish)	A1, A2, A3	Every 6 months	01/01/2006
Dioxin-like PCBs (WHO-TEQ Birds)	A1, A2, A3	Every 6 months	01/01/2006
Poly-cyclic aromatic hydrocarbons (PAHs)	A1, A2, A3	Every 6 months	01/01/2006
Dioxins / furans (WHO-TEQ Humans / Mammals)	A1, A2, A3	Every 6 months	01/01/2006
Dioxins / furans (WHO-TEQ Fish)	A1, A2, A3	Every 6 months	01/01/2006
Dioxins / furans (WHO-TEQ Birds)	A1, A2, A3	Every 6 months	01/01/2006
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	Bottom ash combined sample from lines 1, 2, and 3	Every 6 months	01/07/2009
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	Bottom ash combined sample from lines 1, 2, and 3	Before use of a new disposal or recycling route	01/01/2006
LOI	Bottom ash separate samples from lines 1, 2, and 3	Every 6 months	01/07/2009
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	APC Residues sample taken from tanker at despatch point	Every 6 months	01/07/2009
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	APC Residues sample taken from tanker at despatch point	Before use of a new disposal or recycling route	01/07/2009
Water usage	Installation	Every 12 months	01/01/2006
Energy usage	Installation	Every 12 months	01/01/2006
Waste disposal and/or recovery.	Installation	Every 12 months	01/01/2006

Schedule 3 Table S3 shall be amended as follows:

Table S3: Reporting Forms		
Media or parameter	**Form Number**	**Date of Form**
Air: Periodic monitored emissions biannually	A1	01/01/2006
Air: Continuously monitored emissions of particulate matter	A2	01/01/2006
Air: Continuously monitored emissions of TOC	A3	01/01/2006
Air: Continuously monitored emissions of hydrogen chloride as HCl	A4	01/01/2006
Air: Continuously monitored emissions of Carbon monoxide	A5	01/01/2006
Air: Continuously monitored emissions of Sulphur dioxide	A6	01/01/2006
Air: Continuously monitored emissions of Oxides of nitrogen	A7	01/01/2006
Air: Bi-annual monitored emissions of dioxins, furans, and dioxin-like PCBs	A8	01/01/2006
Sewer: monitoring data	S1	01/01/2006
Bottom Ash, APC Residues: Composition	Ash1	01/07/2009
Bottom Ash, APC Residues: Solubility	Ash2	01/07/2009
Energy	E1	01/01/2006
Waste Return	R1	01/01/2006
Water usage	WU1	01/01/2006
Performance indicators	PI1	01/01/2006

Schedule 3 – conditions to be added

None