



**ENVIRONMENT  
AGENCY**

## Variation Notice with introductory note

Pollution Prevention and Control Regulations 2000

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**Wolverhampton Energy  
from Waste Facility  
MES Environmental Ltd  
Crown Street  
Wolverhampton  
West Midlands  
WV1 1QB.**

Variation Notice number

**HP3536XC**

Permit number

**AP3835SM**

# Introductory note

**This introductory note does not form a part of the permit.**

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 1 containing conditions to be deleted, Schedule 2 conditions to be amended and Schedule 3 conditions to be added.

**Brief description of the changes introduced by this variation notice.**

This Agency initiated minor variation changes the periodic emission limit values for particulate matter, hydrogen chloride, carbon monoxide, sulphur dioxide and oxides of nitrogen. The values in each case are now the same as the half hourly or ten minute averages from the continuous emissions monitors. These changes were made following an appeal against the limits in table 2.2.2 of the original permit by an operator and a subsequent review of the Environment Agency policy.

Minor changes have been added to allow total organic carbon or loss on ignition testing for bottom ash burn-out quality.

## Status Log

<b>Status Log of the permit</b>		
<b>Detail</b>	<b>Date</b>	<b>Response Date</b>
Application AP3835SM	Received 14/03/2005	
Response to request for information	Request dated 10/05/2005	Response dated 11/08/2005
Permit determined	01/12/2005	
Variation notice XP3338MW issued	14/11/2006	
Variation notice HP3536XC issued	30/04/2008	

End of introductory Note



## Variation Notice

Permit number (The Permit)  
**AP3835SM**

Variation number  
**HP3536XC**

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 held by you **MES Environmental Ltd** ("the Operator"),

whose Registered Office (or Principle Office) is  
**Crown Street,  
Wolverhampton,  
West Midlands, WV1 1QB**

**Company registration number 2826294**

to operate the installation at  
**Wolverhampton Energy from Waste Facility,  
Crown Street, Wolverhampton,  
West Midlands, WV1 1QB.**

to the extent set out in Schedules 1 to 3 of this variation notice.

This notice shall take effect from 30 April 2008

Signed

A rectangular box containing a handwritten signature that reads "C. Moss".

**Carl Moss**

Authorised to sign on behalf of the Environment Agency

Date

A rectangular box containing a handwritten date that reads "30 April 2008".

## SCHEDULE 1 - CONDITIONS TO BE DELETED

1.1 None

## SCHEDULE 2 - CONDITIONS TO BE AMENDED

2.1 Table 2.2.2 shall be amended as follows:

Table 2.2.2 : Emission limits to air and monitoring during normal operation					
Emission reference	point	Parameter	Limit (including Reference Period) <sup>1</sup>	Monitoring frequency	Monitoring method
A1,A2		Particulate matter	30 mg/m <sup>3</sup> ½-hr average	Continuous measurement	BS EN 13284-2 6 8
A1,A2		Particulate matter	10 mg/m <sup>3</sup> daily average	Continuous measurement	BS EN 13284-2 6 8
A1,A2		Particulate matter	30 mg/m <sup>3</sup> periodic over minimum 1-hour period	Bi-annual	BS EN 13284-2
A1,A2		Total Organic Carbon (TOC)	20 mg/m <sup>3</sup> ½-hr average	Continuous measurement	BS EN 12619 <sup>6</sup> 8
A1,A2		Total Organic Carbon (TOC)	10 mg/m <sup>3</sup> daily average	Continuous measurement	BS EN 12619 <sup>6</sup> 8
A1,A2		Total Organic Carbon (TOC)	20 mg/m <sup>3</sup> periodic over minimum 1-hour period	Bi-annual	BS EN 12619
A1,A2		Hydrogen chloride	60 mg/m <sup>3</sup> ½-hr average	Continuous measurement	MCERTS certified instruments <sup>7 9</sup>
A1,A2		Hydrogen chloride	10 mg/m <sup>3</sup> daily average	Continuous measurement	MCERTS certified instruments <sup>7 9</sup>
A1,A2		Hydrogen chloride	60 mg/m <sup>3</sup> periodic over minimum 1-hour period	Bi-annual	BS EN 1911
A1,A2		Hydrogen fluoride	2 mg/m <sup>3</sup> periodic over minimum 1-hour period	Quarterly	USEPA Method 26/26A

**Table 2.2.2 : Emission limits to air and monitoring during normal operation**

Emission reference	point	Parameter	Limit (including Reference Period) <sup>1</sup>	Monitoring frequency	Monitoring method
A1,A2		Carbon monoxide	At least 95% of all measurements shall not exceed 150 mg/m <sup>3</sup> in any 24-hour period 10-minute average	Continuous measurement	ISO 12039 <sup>4 8</sup>
A1,A2		Carbon monoxide	50 mg/m <sup>3</sup> daily average	Continuous measurement	ISO 12039 <sup>4 8</sup>
A1,A2		Carbon monoxide	At least 95% of all measurements shall not exceed 150 mg/m <sup>3</sup> periodic over minimum 4 hour period, data to be reported as 10-minute averages	Bi-annual	ISO 12039
A1,A2		Sulphur dioxide	200 mg/m <sup>3</sup> ½-hr average	Continuous measurement	BS 6069-4.4 <sup>5 8</sup>
A1,A2		Sulphur dioxide	50 mg/m <sup>3</sup> daily average	Continuous measurement	BS 6069-4.4 <sup>5 8</sup>
A1,A2		Sulphur dioxide	200 mg/m <sup>3</sup> periodic over minimum 4 hour period, data to be reported as ½ hour averages	Bi-annual	BS 6069-4.1 or alternative method if agreed in writing with the Agency
A1,A2		Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	400 mg/m <sup>3</sup> ½-hr average	Continuous measurement	ISO 10849 <sup>5 8</sup>
A1,A2		Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	200 mg/m <sup>3</sup> daily average	Continuous measurement	ISO 10849 <sup>5 8</sup>
A1,A2		Oxides of nitrogen (NO and NO <sub>2</sub> )	400 mg/m <sup>3</sup> periodic over minimum 4	Bi-annual	ISO 10849 or BS ISO 11564

**Table 2.2.2 : Emission limits to air and monitoring during normal operation**

Emission reference	point	Parameter	Limit (Including Reference Period) <sup>1</sup>	Monitoring frequency	Monitoring method
		expressed as NO <sub>2</sub> )	hour period, data to be reported as ½-hour averages		
A1,A2		Cadmium & thallium and their compounds (total) <sup>2</sup>	0.05 mg/m <sup>3</sup> periodic over minimum 30 minute, maximum 8 hour period	Quarterly	BS EN 14385
A1,A2		Mercury and its compounds <sup>2</sup>	0.05 mg/m <sup>3</sup> periodic over minimum 30 minute, maximum 8 hour period	Quarterly	BS EN 13211
A1,A2		Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total) <sup>2</sup>	0.5 mg/m <sup>3</sup> periodic over minimum 30 minute, maximum 8 hour period	Quarterly	BS EN 14385
A1,A2		Dioxins / furans (I-TEQ)	0.1 ng/m <sup>3</sup> periodic over minimum 6 hours, maximum 8 hour period <sup>3</sup>	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 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 period, 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 25 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 15 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 5: 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 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 6: As Note 5, except that the value of the confidence interval is 30% in place of 20%.

Note 7: As Note 5, except that the value of the confidence interval is 40% in place of 20%.

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

Note 9: The CEM shall be able to measure instantaneous values over the ranges that are to be expected during all operating conditions.

2.2 Table 2.6.1 shall be amended as follows:

<b>Table 2.6.1 : Emission limits and monitoring frequency for solid residues</b>				
<b>Emission point reference</b>	<b>Substance</b>	<b>Limit (Including Reference Period)</b>	<b>Monitoring frequency</b>	<b>Monitoring method</b>
Bottom Ash	Loss on Ignition (LOI)	5%	Quarterly	Agency ash sampling protocol.
Bottom Ash	Total Organic Carbon (TOC)	3%	Quarterly	Agency ash sampling protocol

## **SCHEDULE 3 - CONDITIONS TO BE ADDED**

3.1 None