



**ENVIRONMENT  
AGENCY**

37

# **Variation Notice with introductory note**

**Pollution Prevention and Control (England & Wales) Regulations 2000**

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**Tyseley Energy from Waste Plant**

**Veolia ES Birmingham Limited  
James Road  
Tyseley  
Birmingham  
B11 2BA**

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**Variation Notice Number  
ZP3235MF**

**Permit number  
WP3239SJ**

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# Tyseley Energy from Waste Plant

## Permit Number WP3239SJ

### 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.

This variation allows changes to the installation as follows:-

1. The change of operator name to Veolia ES Birmingham Limited is noted
2. The submission date for Improvement Condition 2 has been extended due to the unavailability of sampling gas and the calibration gas mixing system required to complete the test programme
3. Section 1.5 regarding Minor Operational Changes is no longer included in Permits and has therefore been deleted
4. Tyseley Waste Disposal Limited appealed against the periodic emission limit value for particulate matter and hydrogen chloride in Table 2.2.2 of the original Permit. The Environment Agency will not contest this appeal and consequentially the periodic emission limit value in Table 2.2.2 for these two substances has been amended.
5. The European Waste Catalogue (EWC) Codes in Schedule have been amended to reflect more accurately the types of wastes permitted to be processed on the Installation

#### Status Log of the permit

Detail	Date	Response Date
Application	Received 01/12/2004	
Additional information received	Received 15/08/2005	No response required
Additional information received	Received 1/11/2005	No response required
Permit issue	04/11/2005	
Variation ZP3235MF	27/09/2006	Determined 15/12/2006

End of Introductory Note

**Variation Notice**

Pollution Prevention and Control  
(England and Wales) Regulations 2000

**Variation Notice**

Permit number  
**WP3239SJ**

Variation number  
**ZP3235MF**

The Environment Agency (the Agency) in exercise of its powers under Regulation 17 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No 1973) hereby varies the permit held by you

**Veolia ES Birmingham Limited** ("the Operator"),  
whose registered office (or principal office) is

**James Road  
Tyseley  
Birmingham  
B11 2BA**

company registration number **02692681**

to operate an installation at

**James Road  
Tyseley  
Birmingham  
B11 2BA**

to the extent set out in Schedules 1 to 3 of this Variation Notice.

The notice shall take effect from **15/12/2006**

Signed

Date

	<i>15 December 2006</i>
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**Dr. D. G. Othen**

Authorised to sign on behalf of the Agency

## SCHEDULE 1 – CONDITIONS TO BE DELETED

- 1.1 Section 1.5 Minor Operational Changes comprising conditions 1.5.1 to 1.5.4 inclusive is deleted

## SCHEDULE 2 – CONDITIONS TO BE AMENDED

- 2.1 Condition 2 in Table 1.4.1 is amended as follows :-

Table 1.4.1: Improvement programme		
Reference	Requirement	Date
2	The Operator shall calibrate and verify the performance of Continuous Emission Monitors for release points and parameters as specified in Table 2.2.2 to BS EN 14181 and submit a summary report to the Environment Agency as evidence of compliance with the requirements of BS EN 14181.	Report to be submitted to the Agency by 31/03/2007

- 2.2 Table 2.2.2 is amended as follows :-

Table 2.2.2 : Emission limits to air and monitoring during normal operation				
Emission point reference	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 13284-1
A1 & A2	Total Organic Carbon (TOC)	20 mg/m <sup>3</sup> ½-hr average	Continuous measurement	BS EN 12619 6:8
A1 & A2	Total Organic Carbon (TOC)	10 mg/m <sup>3</sup> daily average	Continuous measurement	BS EN 12619 6:8
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 7:9
A1 & A2	Hydrogen chloride	10 mg/m <sup>3</sup> daily average	Continuous measurement	MCERTS certified instruments 7:9

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

Emission point reference	Parameter	Limit (including Reference Period) <sup>1</sup>	Monitoring frequency	Monitoring method
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	Bi-annual	USEPA Method 26/26A
A1 & A2	Carbon monoxide	100 mg/m <sup>3</sup> ½-hr average	Continuous measurement	ISO 12039 4; 8
A1 & A2	Carbon monoxide	50 mg/m <sup>3</sup> daily average	Continuous measurement	ISO 12039 4; 8
A1 & A2	Carbon monoxide	100 mg/m <sup>3</sup> periodic over minimum 4-hour period.	Bi-annual	ISO 12039
A1 & A2	Sulphur dioxide	200 mg/m <sup>3</sup> ½-hour average	Continuous measurement	BS 6069-4.4 5; 8
A1 & A2	Sulphur dioxide	50 mg/m <sup>3</sup> daily average	Continuous measurement	BS 6069-4.4 5; 8
A1 & A2	Sulphur dioxide	200 mg/m <sup>3</sup> periodic over minimum 4 hour period	Bi-annual	BS 6069-4.1
A1 & A2	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> ) <sup>10</sup>	400 mg/m <sup>3</sup> ½-hour average	Continuous measurement	ISO 10849 5; 8
A1 & A2	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> ) <sup>10</sup>	200 mg/m <sup>3</sup> daily average	Continuous measurement	ISO 10849 5; 8
A1 & A2	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> ) <sup>10</sup>	400 mg/m <sup>3</sup> periodic over minimum 4 hour period.	Bi-annual	ISO 10849 or BS ISO 11564
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

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

<b>Emission point reference</b>	<b>Parameter</b>	<b>Limit (including Reference Period)<sup>1</sup></b>	<b>Monitoring frequency</b>	<b>Monitoring method</b>
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 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 (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 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.

### 2.3 Table 2.6.1 is amended as follows :-

**Table 2.6.1 : Emission limits and monitoring frequency for solid residues**

<b>Emission point reference</b>	<b>Substance</b>	<b>Limit</b>	<b>Monitoring frequency<sup>(1)</sup></b>	<b>Monitoring method</b>
Bottom Ash	Loss on Ignition (LOI)	5%	Quarterly for combined sample from Lines 1 & 2 Annually for individual samples from Lines 1 & 2	Agency ash sampling protocol.

Note 1: Clinical waste bottom ash produced during normal operation is recycled into the MWI Reception Pit

## 2.4 Schedule 6 is amended as follows :-

<b>Permitted Waste Types</b>					
<b>Description</b>	<b>European Waste Catalogue Number (where available) or other specification</b>				<b>Waste type as defined in Table 2.1.2</b>
Mixed municipal wastes, excluding separately collected fractions.	20 03 01.				Mixed municipal wastes
Separately collected fractions including packaging, food wastes, market wastes, street cleaning residues and bulky wastes.	02 01 02; 02 02 02; 02 06 01; 04 02 09; 15 01 01; 15 01 05; 16 02 14; 18 02 03; 20 01 02; 20 01 28; 20 01 39; 20 03 04;	02 01 03; 02 02 03; 02 07 04; 04 02 15; 15 01 02; 15 01 06; 16 03 04; 18 02 06; 20 01 08; 20 01 30; 20 02 01; 20 03 07.	02 01 06; 02 03 04; 03 01 01; 04 02 21; 15 01 03; 15 01 09; 16 03 06; 18 02 08; 20 01 10; 20 01 32; 20 03 01;	02 01 07; 02 05 01; 03 01 05; 04 02 22; 15 01 04; 15 02 03; 18 01 09; 20 01 01; 20 01 11; 20 01 38; 20 03 02;	Municipal waste, separately collected fractions.
Low grade clinical wastes categories A(c), B, E	18 01 04				Clinical wastes not subject to special requirements
Separately collected fractions including veterinary wastes, special packaging, absorbents, organic and inorganic wastes, cytotoxic and cytostatic medicines, wood wastes and special municipal wastes.	02 01 02; 04 02 14; 16 03 03; 18 02 07; 20 01 31;	02 01 06; 04 02 16; 16 03 05; 20 01 26; 20 01 37.	02 02 02; 15 01 10; 18 01 06; 20 01 27;	03 01 04; 15 02 02; 18 02 05; 20 01 29;	Clinical and other wastes subject to special requirements
All categories (A, B, C, D, E) of healthcare and clinical wastes	18 01 01;	18 01 02;	18 01 03		Human or animal healthcare wastes

Wastes from organic  
chemical processes

07 01 03; 07 01 04; 07 01 09; 07 01 10;  
07 02 03; 07 02 04; 07 02 09; 07 02 10;  
07 02 13; 07 03 03; 07 03 04; 07 03 09;  
07 03 10; 07 04 03; 07 04 04; 07 04 09;  
07 04 10; 07 04 13; 07 05 03; 07 05 04;  
07 05 09; 07 05 10; 07 05 13; 07 05 14;  
07 06 03; 07 06 04; 07 06 09; 07 06 10;  
07 07 03; 07 07 04; 07 07 09; 07 07 10.  
09 01 10; 09 01 11; 09 01 12; 16 05 04;  
20 01 35.

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Industrial wastes

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

#### **3.1 None**