

# Notice of variation and consolidation with introductory note

**The Environmental Permitting (England & Wales) Regulations 2016**

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Veolia ES Birmingham Limited  
Tyseley Energy from Waste Plant  
James Road  
Tyseley  
Birmingham  
B11 2BA

**Variation application number**

EPR/WP3239SJ/V009

**Permit number**

EPR/WP3239SJ

# Tyseley Energy from Waste Plant

## Permit number EPR/WP3239SJ

### Introductory note

#### This introductory note does not form a part of the notice

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made.

This variation is to permit the operator to burn hazardous clinical waste in their two municipal waste incineration lines. The Installation already burns this type of waste in their high temperature hazardous waste incineration plant under this Permit.

The schedules specify the changes made to the 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
Application WP3239SJ received	01/12/04	
Additional information received	15/08/05	
Additional information received	01/11/05	
Permit issued	04/11/05	
Variation ZP3235MF received	27/09/06	
Variation EPR/WP3239SJ/V002 determined	15/12/06	
Variation AP3330UH	Duly made 15/02/07	
Variation EPR/WP3239SJ/V003 determined	29/06/07	
Variation UP3237GM	Duly made 24/02/09	
Variation EPR/WP3239SJ/V004 determined	30/03/09	
Variation EPR/WP3239SJ/V005 issued	14/07/09	
Agency initiated EPR/WP3239SJ/V006	07/01/11	
Variation issued	09/05/11	
Agency variation determined EPR/WP3239SJ/V007	03/01/14	Agency variation to implement the changes introduced by IED
Application EPR/WP3239SJ/V008 (variation)	Duly made 31/10/17	Application to change the Carbon Monoxide (CO) monitoring reference period. Agency variation to add FPP conditions and update monitoring methods.
Variation determined EPR/WP3239SJ	14/02/2018	Varied permit issued.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application EPR/WP3239SJ/V009 (variation)	Duly made 30/01/2020	Application to burn infectious clinical waste in municipal waste lines
Variation determined EPR/WP3239SJ (PAS billing ref: YP3105BA)	28/05/2020	

End of introductory note

# Notice of variation and consolidation

## The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

### Permit number

EPR/WP3239SJ

### Issued to

**Veolia ES Birmingham Limited** (“the operator”)

whose registered office is

**James Road**

**Tyseley**

**Birmingham**

**B11 2BA**

company registration number 02692681

to operate a regulated facility at

**Tyseley Energy from Waste Plant**

**James Road**

**Tyseley**

**Birmingham**

**B11 2BA**

to the extent set out in the schedules.

The notice shall take effect from 28/05/2020

Name	Date
Anne Lloyd	28/05/2020

Authorised on behalf of the Environment Agency

## **Schedule 1**

The following conditions were varied as a result of the application made by the operator:

- Condition 1.5
- Table 1.1.1
- Table 2.1.1
- Table 2.2.2
- Table 2.10.1
- Table S6.1
- Table S6.2

## **Schedule 2 – consolidated permit**

Consolidated permit issued as a separate document.

# Permit

## The Environmental Permitting (England and Wales) Regulations 2016

### Permit number

**EPR/WP3239SJ**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/WP3239SJ/V009 authorising,

**Veolia ES Birmingham Limited** (“the operator”),

whose registered office is

**James Road  
Tyseley  
Birmingham  
B11 2BA**

company registration number 02692681

to operate a regulated facility at

### **Tyseley Energy from Waste Plant**

**James Road  
Tyseley  
Birmingham  
B11 2BA**

to the extent authorised by and subject to the conditions of this permit.

<b>Name</b>	<b>Date</b>
<b>Anne Lloyd</b>	<b>28/05/2020</b>

Authorised on behalf of the Environment Agency

# Conditions

## 1 General

### 1.1 Permitted Activities

1.1.1 The Operator is authorised to carry out the activities specified in Table 1.1.1.

<b>Table 1.1.1 activities</b>		
<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
Section 5.1 A(1)(b) – The incineration of non-hazardous waste in a waste incineration plant or waste co-incineration plant with a capacity exceeding 3 tonnes per hour.	Incineration of municipal solid waste and other specified non-hazardous wastes including low-grade clinical waste in the two municipal waste incineration lines.	Receipt and storage of municipal and specified non-hazardous wastes, through pre-treatment and incineration to dispatch of residual waste. Heat recovery, power generation, flue gas cleaning and monitoring systems, including handling, storage, recycling and dispatch of waste materials arising. (Does not include the adjacent Household Recycling Centre).
Section 5.1 A(1)(a) – The incineration of hazardous waste in an incineration plant.	Incineration of clinical waste in the two municipal waste incineration lines	From receipt of waste to discharge of exhaust gases. Waste charged direct to hopper via hoist system. <b>Waste codes 18 01 03* and 18 02 02*. No more than 5% of the total waste throughput of the municipal waste incineration lines.</b>
Section 5.1 A(1)(a) – The incineration of hazardous waste in an incineration plant.	Incineration of clinical waste and other specified hazardous wastes in the high temperature incinerator (HTI)	Receipt and storage of clinical and specified hazardous wastes, through pre-treatment and incineration to dispatch of residual waste. Heat recovery and monitoring systems, including handling, storage and dispatch of waste materials arising.
<b>Directly Associated Activities</b>		
-	Transfer of clinical waste	Receipt of clinical waste, storage and transfer off site. Only if one or more incineration line is shut-down. Storage of less than 50 tonnes of hazardous waste

## 1.2 Site

- 1.1.1 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the land shown edged in green on the Site Plan at Schedule 5 to this Permit.

## 1.3 Overarching Management Condition

- 1.3.1 Without prejudice to the other conditions of this Permit, the Operator shall implement and maintain a management system, organisational structure and allocate resources that are sufficient to achieve compliance with the limits and conditions of this Permit.

## 1.4 Improvement Programme

- 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

- 1.4.2 Where the Operator fails to comply with any requirement by the date specified in Table 1.4.1 the Operator shall send written notification of such failure to the Agency within 14 days of such date.

## 1.5 Pre-Operational Conditions

- 1.5.1 There are no pre-operational conditions

## 1.6 Off-site Conditions

- 1.6.1 There are no off-site conditions



## 2 Operating conditions

### 2.1 In-Process Controls

- 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 and 2.2 given in pages 4 to 41 of the Application including the additional information received on 15/08/2005 and 01/11/2005	1/12/2004
Variation application (EPR/WP3239SJ/V009)	The response to question 3 of application form C3. Supporting statement sections: 3, 4.2, 5, 7 and 8	30/01/2020

- 2.1.2 The Permitted Installation shall, subject to the other conditions of this Permit, be operated using the techniques and in the manner described in the Site Protection and Monitoring Programme submitted under condition 4.1.8 of this Permit or as otherwise agreed in writing by the Agency.
- 2.1.3 Only the waste types specified in Schedule 6, tables S6.1, S6.2 and S6.3 shall be incinerated in the Permitted Installation, in quantities not exceeding those specified for each set of waste types specified in table S2.1.2.

**Table 2.1.2: Permitted Waste Types**

Waste types and codes	Limitations	Maximum throughput
Mixed Municipal wastes 20 03 01	Excluding separately collected fractions unless recycling / recovery options cannot be exploited	400,000 tonnes / year
Municipal wastes 02 01 03; 02 01 07; 02 02 03; 02 03 04; 02 05 01; 02 06 01; 02 07 04; 03 01 01; 03 01 05; 04 02 09; 04 02 15; 04 02 21; 04 02 22; 15 01 01; 15 01 02; 15 01 03; 15 01 04; 15 01 05; 15 01 06; 15 01 09; 15 02 03; 16 02 14; 16 03 04; 16 03 06; 16 05 05; 18 01 09; 18 02 03; 18 02 06; 18 02 08; 20 01 01; 20 01 02; 20 01 08; 20 01 10; 20 01 11; 20 01 28; 20 01 30; 20 01 32; 20 01 38; 20 01 39; 20 02 01; 20 03 01; 20 03 02; 20 03 04; 20 03 07.	Separately collected fractions including packaging, food wastes, market wastes, street cleaning residues and bulky wastes	5,000 tonnes / year
Clinical wastes not subject to special requirements. 18 01 04	Low Grade clinical wastes categories A(c), B, E	24,000 tonnes / year

<b>Table 2.1.2: Permitted Waste Types</b>		
<b>Waste types and codes</b>	<b>Limitations</b>	<b>Maximum throughput</b>
Clinical and other wastes subject to special requirements. 02 01 02; 02 01 06; 02 02 02; 03 01 04; 04 02 14; 04 02 16; 07.05.14; 15 01 10; 15 02 02; 16 03 03; 16 03 05; 18 01 06; 18.01.08; 18.02.01; 18.02.02; 18 02 05; 18 02 07; 20 01 26; 20 01 27; 20 01 29; 20 01 31; 20 01 37; 20 01 99 (drug abuse litter only)	Separately collected fractions including veterinary wastes, special packaging, absorbents, organic and inorganic wastes, cytotoxic and cytostatic medicines, wood wastes and special municipal wastes.	3,000 tonnes / year
Human or animal healthcare wastes. 18 01 01; 18 01 02; 18 01 03	All categories ( A, B, C, D, E) of healthcare and clinical wastes.	7,000 tonnes / year
Industrial wastes 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	Wastes from organic chemical processes	1,500 tonnes / year

- 2.1.4 The Operator shall incinerate only those hazardous wastes where the throughputs, calorific values and pollutant composition are within the ranges specified in the Application
- 2.1.5 The Operator shall ensure that prior to accepting waste subject to condition 2.1.4 at the Permitted Installation, it has obtained sufficient information about the hazardous wastes to be burned to demonstrate compliance with the characteristics described in condition 2.1.4.
- 2.1.6 Waste shall not be charged, or shall cease to be charged, into the incinerator if:
- the combustion chamber temperature is below, or falls below, 850°C for non-hazardous waste or hazardous waste where the content of halogenated organic substances (as chlorine) does not exceed 1%, 1100°C for hazardous waste where the content of halogenated organic substances exceeds 1% (as chlorine), 1000°C where cytotoxic or cytostatic drugs are burned; or
  - any continuous emission limit value in Table 2.2.2(a) is exceeded; or
  - any continuous emission limit value in Table 2.2.2 is exceeded, other than under the abnormal operating conditions; or
  - monitoring results required to demonstrate compliance with any continuous emission limit value in Table 2.2.2 are unavailable other than under abnormal operating conditions.
- 2.1.7 The Operator shall operate at least one auxiliary burner in each line of the Permitted Installation at start-up or shut-down or whenever the operating temperature falls below that specified in condition 2.1.6, as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.1.6 is maintained in the combustion chamber, such burner(s) may be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.
- 2.1.8 The Operator shall record the beginning and end of each period of abnormal operation.

- 2.1.9 During a period of abnormal operation, the Operator shall restore normal operation of the failed equipment or replace the failed equipment as rapidly as possible.
- 2.1.10 Where, during abnormal operation, any of the following situations arise, the Operator shall, as soon as is practicable, cease the burning of waste until normal operation can be restored:
- continuous measurement shows that an emission exceeds any emission limit value in Table 2.2.2, or continuous emission monitor(s) are out of service, as the case may be, for a total of four hours uninterrupted duration;
  - the cumulative duration of abnormal operation periods over one calendar year exceeds 60 hours on an incineration line;
  - continuous measurement shows that an emission exceeds any emission limit value in Table 2.2.2 (a);
  - the alternative techniques to demonstrate compliance with the abnormal operation emission limit value(s) in Table 2.2.2 (a), as detailed in the Application or as agreed in writing with the Agency, are unavailable.
- 2.1.11 The Operator shall interpret the end of the period of abnormal operation as the earliest of the following:
- when the failed equipment is repaired and brought back into effective normal operation;
  - when the Operator initiates a shut-down of the waste combustion activity, as described in the Application;
  - when a period of 4 hours has elapsed from the start of the abnormal operation;
  - when, in any calendar year, an aggregated period of 60 hours abnormal operation has been reached for a given incineration line.
- 2.1.12 Infectious clinical waste must be placed in the furnace without first being mixed with other categories of waste, using techniques which are no less effective than those described in the Application.

## 2.2 Emissions

### 2.2.1 Emissions to Air, (including heat, but excluding Odour, Noise or Vibration) from Specified Points

- 2.2.1.1 This Part 2.2.1 of this Permit shall not apply to releases of odour, noise or vibration.
- 2.2.1.2 Emissions to air from the emission points in Table 2.2.1 shall only arise from the source(s) specified in that Table.

**Table 2.2.1 : Emission points to air**

<b>Emission point reference number</b>	<b>Source</b>	<b>Location of emission point</b>
A1	Flue gases from Incinerator Line 1 & CWI	Reference point 11 on site plan
A2	Flue gases from Incinerator Line 2 & CWI	Reference point 11 on site plan

NB. Emission points A1 and A2 are enclosed in a common outer skin twin flue chimney stack

2.2.1.3 The limits for emissions to air for the parameter(s) and emission point(s) 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 parameter(s) and emission point(s) set out in Table 2.2.2 (a) shall not be exceeded.

<b>Table 2.2.2 Emission Limits to air and monitoring during normal operation</b>				
<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	Particulate matter	30 mg/m <sup>3</sup> ½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>5,8</sup>
A1 & A2	Particulate matter	10 mg/m <sup>3</sup> daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>5,8</sup>
A1 & A2	Total Organic Carbon (TOC)	20 mg/m <sup>3</sup> ½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>5,8</sup>
A1 & A2	Total Organic Carbon (TOC)	10 mg/m <sup>3</sup> daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>5,8</sup>
A1 & A2	Hydrogen chloride	60 mg/m <sup>3</sup> ½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>6,9</sup>
A1 & A2	Hydrogen chloride	10 mg/m <sup>3</sup> daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>6,9</sup>
A1 & A2	Hydrogen fluoride	2 mg/m <sup>3</sup> periodic over minimum 1-hour period	Bi-annual	BS ISO 15713
A1 & A2	Carbon monoxide	150 mg/m <sup>3</sup> 95% of all 10-minute averages in a calendar day	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>7,8</sup>
A1 & A2	Carbon monoxide	50 mg/m <sup>3</sup> daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>7,8</sup>
A1 & A2	Sulphur dioxide	200 mg/m <sup>3</sup> ½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>4,8</sup>
A1 & A2	Sulphur dioxide	50 mg/m <sup>3</sup> daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>4,8</sup>
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-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>4,8</sup>
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	BS EN 14181 and BS EN 15267-3 <sup>4,8</sup>
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	Bi-annual	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	Mercury and its compounds <sup>2</sup>	0.05 mg/m <sup>3</sup> periodic over minimum 30 minute, maximum 8 hour period	Bi-annual	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	Bi-annual	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 Parts 1, 2 and 3

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 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 the 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-hourly 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 30% in place of 20%.

Note 6: As Note 4, except that the value of the confidence interval is 40% in place of 20%.

Note 7: 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 ten 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 are not available for a complete 10-minute period, the 10-minute average shall in any case 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 15 per day. Daily average values shall be determined as the average of all the valid ten minute average values within a calendar day. The daily average value will be considered valid if no more than fifteen ten 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 8: MCERTS certification to the appropriate ranges and determinants 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 range 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 2.2.2 (a) : Emission limits to air and monitoring during abnormal operating conditions**

<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	Particulate matter	150 mg/m <sup>3</sup> ½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>42</sup> during abatement plant failure or during failure of the continuous emission monitor
A1 & A2	Total Organic Carbon (TOC)	20 mg/m <sup>3</sup> ½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>42</sup> or alternative surrogate as specified in the Application during failure of the continuous emission monitor
A1 & A2	Carbon monoxide	150 mg/m <sup>3</sup> 95% of all 10-minute averages in a calendar day	Continuous measurement	BS EN 14181 and BS EN 15267-3 <sup>43</sup> or alternative surrogate as specified in the Application during failure of the continuous emission monitor

Note 1: See section 6 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) 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 the 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-hourly period. (The number of half-hourly averages so validated shall not exceed 5 per day).

Note 3: 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 ten 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 are 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. Daily average values shall be determined as the average of all the 10-minute average values within a calendar day. The daily average value shall 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 4: MCERTS certification to the appropriate ranges and determinants is a demonstration of compliance to the applicable standards.

## 2.2.2 Emissions to water (other than groundwater), including heat, from specified points

2.2.2.1 This Part 2.2.2 of this Permit shall not apply to releases of odour, noise or vibration or to releases to groundwater.

2.2.2.2 Conditions 2.2.2.3 - 2.2.2.4 shall not apply to emissions to sewer.

2.2.2.3 Emissions to water from the emission point(s) specified in Table 2.2.4 shall only arise from the source(s) specified in that Table

**Table 2.2.4: Emission point to water**

Emission Point Reference or description	Source	Receiving Water
Reference point W1 on site plan	Run-off from roads and car parks discharge via an oil interceptor	River Cole

2.2.2.4 The limits for the emissions to water for the parameter(s) and emission point(s) set out in Table 2.2.5 shall not be exceeded.

**Table 2.2.5 : Emission limits to water and monitoring**

Emission point reference	Parameter	Limit (including Reference Period)	Monitoring frequency	Monitoring method
W1	Mineral oils and hydrocarbons	5mg/l	Annual	BS EN 872:1996

## Emissions to sewer

2.2.2.5 Emissions to sewer from the specified emission points in Table 2.2.7 shall only arise from the source(s) specified in that Table, there are no other specific controls imposed on emissions to sewer in this Part of the Permit.

**Table 2.2.7 Emission points to sewer**

<b>Emission point reference or description</b>	<b>Source</b>	<b>Sewer</b>
Reference point S1 on site plan	Interceptor 1, which receives drain water from the turbine house, boiler house area and ash handling area (also transfer water from Interceptor 2	Severn Trent Water Limited

NB: This is deemed to be a zero discharge facility, ie during normal operation process water is recycled back into the process and not discharged to sewer.

## 2.2.3 Emissions to groundwater

2.2.3.1 No emission from the Permitted Installation shall give rise to the introduction into groundwater of any substance in List I (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).

2.2.3.2 No emission from within the Permitted Installation shall give rise to the introduction into groundwater of any substance in List II (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)) so as to cause pollution (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).

2.2.3.3 For substances other than those in List I or II (as defined in the Groundwater Regulations 1998 (SI 1998 No.2746)), the Operator shall use BAT to prevent or where that is not practicable to reduce emissions to groundwater from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application, .

## 2.2.4 Fugitive emissions of substances to air

2.2.4.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to air from the Permitted Installation in particular from:

- storage areas
- buildings
- pipes, valves and other transfer systems
- open surfaces

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

## 2.2.5 Fugitive emissions of substances to water and sewer

2.2.5.1 Subject to condition 2.2.5.2 below, the Operator shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to water (other than Groundwater) and sewer from the Permitted Installation in particular from:

- all structures under or over ground
- surfacing
- bunding
- storage areas

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.5.2 There shall be no release to water that would cause a breach of an EQS established by the UK Government to implement the Dangerous Substances Directive 76/464/EEC.



## 2.2.6 Odour

2.2.6.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce odorous emissions from the Permitted Installation, in particular by:

- limiting the use of odorous materials
- restricting odorous activities
- controlling the storage conditions of odorous materials
- controlling processing parameters to minimise the generation of odour
- optimising the performance of abatement systems
- timely monitoring, inspection and maintenance
- employing, where appropriate, an approved odour management plan

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

## 2.2.7 Emissions to Land

2.2.7.1 This Part 2.2.7 of this Permit shall not apply to emissions to groundwater.

2.2.7.2 No emission from the Permitted Installation shall be made to land.

## 2.2.8 Other technical measures

2.2.8.1 Where other technical measures of control are used to supplement or replace emission limit values in accordance with Regulation 12(8) of the PPC Regulations, the Operator shall comply with the requirements specified in Table 2.2.11.

**Table 2.2.11: Equivalent parameters and technical measures**

<b>Parameter or measure</b>	<b>Requirement or description of measure, and frequency if relevant</b>
Bottom ash burn-out quality	The Permitted Installation must be operated to ensure that the bottom ash shall have a total organic carbon (TOC) content less than 3%, or a loss on ignition of less than 5% of the dry weight of the ash

## 2.3 Management

2.3.1 A copy of this Permit and those parts of the application referred to in this Permit shall be available, at all times, for reference by all staff carrying out work subject to the requirements of the Permit.

### **Training**

2.3.2 The Permitted Installation shall be supervised by staff who are suitably trained and fully conversant with the requirements of this Permit.

2.3.3 All staff shall be fully conversant with those aspects of the Permit conditions which are relevant to their duties and shall be provided with adequate professional technical development and training and written operating instructions to enable them to carry out their duties.

2.3.4 The Operator shall maintain a record of the skills and training requirements for all staff whose tasks in relation to the Permitted Installation may have an impact on the environment and shall keep records of all relevant training.

### **Maintenance**

- 2.3.5 All plant and equipment used in operating the Permitted Installation, the failure of which could lead to an adverse impact on the environment, shall be maintained in good operating condition.
- 2.3.6 The Operator shall maintain a record of relevant plant and equipment covered by condition 2.3.5 and for such plant and equipment:
- 2.3.6.1 a written or electronic maintenance programme; and
  - 2.3.6.2 records of its maintenance.

### ***Incidents and Complaints***

- 2.3.7 The Operator shall maintain and implement written procedures for:
- 2.3.7.1 taking prompt remedial action, investigating and reporting actual or potential non-compliance with operating procedures or emission limits; and
  - 2.3.7.2 investigating incidents, (including any malfunction, breakdown or failure of plant, equipment or techniques, down time, any short term and long term remedial measures and near misses) and prompt implementation of appropriate actions; and
  - 2.3.7.3 ensuring that detailed records are made of all such actions and investigations.
- 2.3.8 The Operator shall record and investigate complaints concerning the Permitted Installation's effects or alleged effects on the environment. The record shall give the date and nature of complaint, time of complaint, name of complainant (if given), a summary of any investigation and the results of such investigation and any actions taken.

## **2.4 Efficient use of raw materials**

- 2.4.1 The Operator shall -
- 2.4.1.1 maintain the raw materials table or description submitted in response to Section 2.4 of the Application and in particular consider on a periodic basis whether there are suitable alternative materials to reduce environmental impact;
  - 2.4.1.2 carry out periodic waste minimisation audits and water use efficiency audits. If such an audit has not been carried out in the 2 years prior to the issue of this Permit, then the first such audit shall take place within 2 years of its issue. The methodology used and an action plan for increasing the efficiency of the use of raw materials or water shall be submitted to the Agency within 2 months of completion of each such audit and a review of the audit and a description of progress made against the action plan shall be submitted to the Agency at least every 4 years thereafter; and
  - 2.4.1.3 ensure that incoming water use is directly measured and recorded.

## **2.5 Waste Storage and Handling**

- 2.5.1 The Operator shall design, maintain and operate all facilities for the storage and handling of waste on the Permitted Installation such that there are no releases to water or land during normal operation and that emissions to air and the risk of accidental release to water or land are minimised.
- 2.5.2 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of litter from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

## 2.6 Waste recovery or disposal

- 2.6.1 Waste produced at the Permitted Installation shall be:
- 2.6.1.1 recovered to no lesser extent than described in the Application; and
  - 2.6.1.2 where not recovered, disposed of while avoiding or reducing any impacts on the environment provided always that this is not done in any way that would have a greater effect on the environment than that described in the Application.
- 2.6.2 The Operator shall maintain the waste recovery or disposal table or description submitted in response to Section 2.6 of the Application and in particular review the available options for waste recovery and disposal for the purposes of complying with condition 2.6.1 above.
- 2.6.3 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin, destination (including whether this is a recovery or disposal operation) and where relevant removal date of any waste that is produced at the Permitted Installation.
- 2.6.4 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin and delivery date of any waste that is received for disposal or recovery at the Permitted Installation.
- 2.6.5 Bottom ash and APC residues shall not be mixed
- 2.6.6 Wastes produced at the Permitted Installation shall, as a minimum, be sampled and analysed in accordance with Table 2.6.1. Additional samples shall be taken and tested and appropriate action taken, whenever:
- disposal or recovery routes change; or
  - it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

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

Emission point reference	Substance	Limit	Monitoring frequency (1)	Monitoring method
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

## 2.7 Energy Efficiency

- 2.7.1 The Operator shall produce a report on the energy consumed at the Permitted Installation over the previous calendar year, by 31 January each year, providing the information required by condition 4.1.2.
- 2.7.2 The Operator shall maintain and update annually an energy management system which shall include, in particular, the monitoring of energy flows and targeting of areas for improving energy efficiency.
- 2.7.3 The Operator shall design, maintain and operate the Permitted Installation so as to secure energy efficiency, taking into account relevant guidance including the Agency's Energy Efficiency Horizontal Guidance Note as from time to time amended. Energy efficiency shall be secured in particular by:

- ensuring that the appropriate operating and maintenance systems are in place;
- ensuring that all plant is adequately insulated to minimise energy loss or gain;
- ensuring that all appropriate containment methods, (e.g. seals and self-closing doors) are employed and maintained to minimise energy loss;
- employing appropriate basic controls, such as simple sensors and timers, to avoid unnecessary discharge of heated water or air;
- where building services constitute more than 5% of the total energy consumption of the Installation, identifying and employing the appropriate energy efficiency techniques for building services, having regard in particular to the Building services part of the Agency's Energy Efficiency Horizontal Guidance Note H2; and
- maintaining and implementing an energy efficiency plan which identifies energy saving techniques that are applicable to the activities and their associated environmental benefit and prioritises them, having regard to the appraisal method in the Agency's Energy Efficiency Horizontal Guidance Note H2.

## 2.8 Accident prevention and control

2.8.1 The Operator shall maintain and implement when necessary the accident management plan submitted or described in response to Section 2.8 of the Application. The plan shall be reviewed at least every 2 years or as soon as practicable after an accident, whichever is the earlier, and the Agency notified of the results of the review within 2 months of its completion.

## 2.9 Noise and Vibration

2.9.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of noise and vibration from the Permitted Installation, in particular by:

- equipment maintenance, eg. of fans, pumps, motors, conveyors and mobile plant;
- use and maintenance of appropriate attenuation, eg. silencers, barriers, enclosures;
- timing and location of noisy activities and vehicle movements;
- periodic checking of noise emissions, either qualitatively or quantitatively; and
- maintenance of building fabric,

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

## 2.10 On-site Monitoring

2.10.1 The Operator shall maintain and implement an emissions monitoring programme which ensures that emissions are monitored from the specified points, for the parameters listed in and to the frequencies and methods described in Tables 2.2.2, 2.2.2a, and 2.2.5 unless otherwise agreed in writing, and that the results of such monitoring are assessed. The programme shall ensure that monitoring is carried out under an appropriate range of operating conditions.

2.10.2 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in Tables 2.2.2 and 2.2.2a, the Operator shall perform a QAL2 test as specified in BS EN 14181 at least every three years and when there are significant changes to either the process, the fuel used or to the CEMs themselves.

2.10.3 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in Tables 2.2.2 and 2.2.2a, the Operator shall perform an Annual Surveillance Test (AST) at least annually, as specified within BS EN 14181.

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**

<b>Emission point reference or source or description of point of measurement</b>	<b>Substance or parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring method</b>	<b>Other specifications</b>
A1 & A2	Temperature (°C)	continuous	As described in the application	
A1 & A2	Pressure (kPa)	continuous	As described in the application	
A1 & A2	oxygen content (%)	continuous	As described in the application	
A1 & A2	water vapour content (%)	continuous	As described in the application	
A1 & A2	Ammonia (NH <sub>3</sub> )	continuous ½-hr & daily average	As described in the application	
A1 & A2	Nitrous oxide (N <sub>2</sub> O) (mg/m <sup>3</sup> )	Bi-annual periodic measurement over minimum 1 hour period.	BS EN ISO 21258	
A1 & A2	Dioxin-like PCBs (WHO-TEQ Humans / Mammals) <sup>1</sup> (ng/m <sup>3</sup> )	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)	
A1 & A2	Dioxin-like PCBs (WHO-TEQ Fish) <sup>1</sup> (ng/m <sup>3</sup> )	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)	
A1 & A2	Dioxin-like PCBs (WHO-TEQ Birds) <sup>1</sup> (ng/m <sup>3</sup> )	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**

<b>Emission point reference or source or description of point of measurement</b>	<b>Substance or parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring method</b>	<b>Other specifications</b>
A1 & A2	Specific individual polycyclic aromatic hydrocarbons (PAHs) (ng/m <sup>3</sup> )	Bi-annual periodic measurement. average value over sample period of between 6 and 8 hours.	Procedure shall use BS ISO 11338-1 and BS-ISO 11338-2.	
A1 & A2	Dioxins/furans (WHO-TEQ Humans / Mammals) <sup>1</sup> (ng/m <sup>3</sup> )	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)	
A1 & A2	Dioxins/furans (WHO-TEQ Fish) <sup>1</sup> (ng/m <sup>3</sup> )	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)	
A1 & A2	Dioxins/furans (WHO-TEQ Birds) <sup>1</sup> (ng/m <sup>3</sup> )	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 (Combined sample from Lines 1 & 2)	Metals (%) (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds,	Quarterly	Sampling and analysis as per Agency ash sampling protocol.	

**Table 2.10.1 : Other monitoring requirements**

<b>Emission point reference or source or description of point of measurement</b>	<b>Substance or parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring method</b>	<b>Other specifications</b>
Bottom Ash (Combined sample from Lines 1 & 2)	Dioxins/furans and dioxin-like PCBs.(TEQ) <sup>1</sup> (ng/kg)	Quarterly	Sampling and analysis as per Agency ash sampling protocol.	
Bottom Ash (Individual sample from Line 1 & Line 2)	Metals (%) (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds,	Annually	Sampling and analysis as per Agency ash sampling protocol.	
Bottom Ash (Individual sample from Line 1 & Line 2)	Dioxins/furans and dioxin-like PCBs.(TEQ) <sup>1</sup> (ng/kg)	Annually	Sampling and analysis as per Agency ash sampling protocol.	
Bottom Ash (Point of measurement to be agreed by the Agency)	Total soluble fraction and metals (mg/kg) (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.	

**Table 2.10.1 : Other monitoring requirements**

<b>Emission point reference or source or description of point of measurement</b>	<b>Substance or parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring method</b>	<b>Other specifications</b>
APC Residues (Individual sample from Line 1 & Line 2)	Metals (%) (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds,	Quarterly	Sampling and analysis as per Agency ash sampling protocol.	
APC Residues (Individual sample from Line 1 & Line 2)	Dioxins/furans and dioxin-like PCBs.(TEQ) <sup>1</sup> (ng/kg)	Quarterly	Sampling and analysis as per Agency ash sampling protocol.	
APC Residues (Point of measurement to be agreed by the Agency)	Total soluble fraction and metals (mg/kg) (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.	
Location justified in application	Combustion Chamber Temperature (°C)	Continuous	Traceable to National Standards	

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..



- 2.10.5 The Operator shall notify the Agency at least 14 days in advance of undertaking monitoring and/or spot sampling, where such notification has been requested in writing by the Agency.
- 2.10.6 The Operator shall maintain records of all monitoring taken or carried out (this includes records of the taking and analysis of samples instrument measurements (periodic and continual), calibrations, examinations, tests and surveys) and any assessment or evaluation made on the basis of such data.
- 2.10.7 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme in condition 2.10.1 of this Permit and the environmental or other monitoring specified in condition 2.10.4 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing. Newly installed CEMs, or CEMs replacing existing CEMs, shall have MCERTS certification unless otherwise agreed in writing and have an MCERTS certified range which is not greater than 1.5 times the daily emission limit value (ELV) specified in Table 2.2.2. The CEM shall also be able to measure instantaneous values over the ranges which 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.
- 2.10.8 There shall be provided:
- 2.10.8.1 safe and permanent means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 2 to this Permit, unless otherwise specified in that Schedule; and
- 2.10.8.2 safe means of access to other sampling/monitoring points when required by the Agency.
- 2.10.9 The Operator shall carry out the on-going monitoring identified in the Site Protection and Monitoring Programme submitted under condition 4.1.8, unless otherwise agreed in writing by the Agency.

## **2.11 Closure and Decommissioning**

- 2.11.1 The Operator shall maintain and operate the Permitted Installation so as to prevent or minimise any pollution risk, including the generation of waste, on closure and decommissioning in particular by:-
- 2.11.1.1 attention to the design of new plant or equipment;
- 2.11.1.2 the maintenance of a record of any events which have, or might have, impacted on the condition of the site along with any further investigation or remediation work carried out; and
- 2.11.1.3 the maintenance of a site closure plan to demonstrate that the Installation can be decommissioned avoiding any pollution risk and returning the site of operation to a satisfactory state.
- 2.11.2 Notwithstanding condition 2.11.1 of this Permit, the Operator shall carry out a full review of the Site Closure Plan at least every 4 years.
- 2.11.3 The site closure plan shall be implemented on final cessation or decommissioning of the Permitted activities or part thereof.
- 2.11.4 The Operator shall give at least 30 days written notice to the Agency before implementing the site closure plan.

## **2.12 Multiple Operator installations**

2.12.1 This is not a multi-Operator installation

## **2.13 Transfer to effluent treatment plant**

2.13.1 No transfer from the Permitted Installation shall be made to effluent treatment plant.

## **2.14 Fire prevention**

2.14.1 The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.

2.14.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
- (b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

### 3 Records

- 3.1 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the Permitted Installation shall:-
- 3.1.1 be made available for inspection by the Agency at any reasonable time;
  - 3.1.2 be supplied to the Agency on demand and without charge;
  - 3.1.3 be legible;
  - 3.1.4 be made as soon as reasonably practicable;
  - 3.1.5 indicate any amendments which have been made and shall include the original record wherever possible;
  - 3.1.6 be retained at the Permitted Installation, or other location agreed by the Agency in writing, for a minimum period of 4 years from the date when the records were made, unless otherwise agreed in writing; and
  - 3.1.7 where they concern the condition of the site of the Installation or are related to the implementation of the Site Protection and Monitoring Programme, be kept at the Permitted Installation, or other location agreed by the Agency in writing, until all parts of the Permit have been surrendered.

## 4 Reporting

- 4.1.1 All reports and written and or oral notifications required by this Permit and notifications required by Regulation 16 of the PPC Regulations shall be made or sent to the Agency using the contact details notified in writing to the Operator by the Agency.
- 4.1.2 The Operator shall, unless otherwise agreed in writing, submit reports of the monitoring and assessment carried out in accordance with the conditions of this Permit, as follows:-
- 4.1.2.1 in respect of the parameters and emission points specified in Table S2 to Schedule 2;
  - 4.1.2.2 for the reporting periods specified in Table S2 to Schedule 2 and using the forms specified in Table S3 to Schedule 3;
  - 4.1.2.3 giving the information from such results and assessments as may be required by the forms specified in those Tables; and
  - 4.1.2.4 to the Agency within 28 days of the end of the reporting period.
- 4.1.3 The Operator shall submit to the Agency a report on the performance of the Permitted Installation over the previous year, by 31 January each year, providing the information listed in Tables S4.1 and S4.2 of Schedule 4, assessed at any frequency specified therein, and using the form specified in Table S3 to Schedule 3.
- 4.1.4 The Operator shall submit an annual performance report on the functioning and monitoring of the incineration plant in a format agreed with the Environment Agency by the 31st January each year. The report shall, as a minimum requirement, give an account of the running of the process and the emissions into air and water compared with the emission standards in the Waste Incineration Directive, as required by Article 12(2) of the Waste Incineration Directive. The first report shall be submitted by the 31st January 2007.
- 4.1.5 The Operator shall review fugitive emissions, having regard to the application of Best Available Techniques, on an annual basis, or such other period as shall be agreed in writing by the Agency, and a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to reduce them within 3 months of the end of such period.
- 4.1.6 Where the Operator has a formal environmental management system applying to the Permitted Installation which encompasses annual improvement targets the Operator shall, not later than 31 January in each year, provide a summary report of the previous year's progress against such targets.
- 4.1.7 The Operator shall, within 6 months of receipt of written notice from the Agency, submit to the Agency a report assessing whether all appropriate preventive measures continue to be taken against pollution, in particular through the application of the best available techniques, at the Installation. The report shall consider any relevant published technical guidance current at the time of the notice which is either supplied with or referred to in the notice, and shall assess the costs and benefits of applying techniques described in that guidance, or otherwise identified by the Operator, that may provide environmental improvement.
- 4.1.8 The Operator shall, within two months of the date of this permit, submit a detailed Site Protection and Monitoring Programme, in accordance with and using the appropriate template format given in the Land Protection Guidance. The Operator shall implement and maintain the Site Protection and Monitoring Programme (SPMP) submitted under this condition, and shall carry out regular reviews of it at a minimum frequency of every 2 years. The results of such reviews and any changes made to the SPMP shall be reported to the Agency within 1 month of the review or change.

## 5 Notifications

- 5.1.1 The Operator shall notify the Agency **without delay** of:-
- 5.1.1.1 the detection of an emission of any substance which exceeds any limit or criterion in this Permit specified in relation to the substance;
  - 5.1.1.2 the detection of any fugitive emission which has caused, is causing or may cause significant pollution;
  - 5.1.1.3 the detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or has the potential to cause significant pollution;
  - 5.1.1.4 any accident which has caused, is causing or has the potential to cause significant pollution; and
  - 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 6.1.1.
- 5.1.2 The Operator shall submit written confirmation to the Agency of any notification under condition 5.1.1, by sending:-
- 5.1.2.1 the notifications under conditions 5.1.1.1 - 5.1.1.4, the information listed in Part A of Schedule 1 to this Permit within 24 hours of such notification; and
  - 5.1.2.2 for notifications under conditions 5.1.1.1 - 5.1.1.4, the more detailed information listed in Part B of the Schedule as soon as possible thereafter;
  - 5.1.2.3 for notifications under conditions 5.1.1.5, the information listed in Part C of Schedule 1 as soon as practicable thereafter;
- and such information shall be in accordance with that Schedule.
- 5.1.3 The Operator shall give written notification as soon as practicable prior to any of the following:-
- 5.1.3.1 permanent cessation of the operation of part or all of the Permitted Installation;
  - 5.1.3.2 cessation of operation of part or all of the Permitted Installation for a period likely to exceed 1 year; and
  - 5.1.3.3 resumption of the operation of part or all of the Permitted Installation after a cessation notified under condition 5.1.3.2.
- 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 submitted under condition 4.1.8 of this Permit.
- 5.1.5 The Operator shall notify the following matters to the Agency in writing within 14 days of their occurrence:-
- 5.1.5.1 where the Operator is a registered company:-
    - any change in the Operator's trading name, registered name or registered office address;
    - any change to particulars of the Operator's ultimate holding company (including details of an ultimate holding company where an Operator has become a subsidiary)
    - any steps taken with a view to the Operator going into administration, entering into a company voluntary arrangement or being wound up;
  - 5.1.5.2 where the Operator is a corporate body other than a registered company:

- any change in the Operator's name or address;
  - any steps taken with a view to the dissolution of the Operator.
- 5.1.5.3 In any other case: -
- the death of any of the named Operators (where the Operator consists of more than one named individual);
  - any change in the Operator's name(s) or address(es);
  - any steps taken with a view to the Operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case them being in a partnership, dissolving the partnership;
- 5.1.6 Where the Operator has entered into a Climate Change Agreement with the Government, the Operator shall notify the Agency within one month of:-
- 5.1.6.1 a decision by the Secretary of State not to re-certify that Agreement.
- 5.1.6.2 a decision by either the Operator or the Secretary of State to terminate that agreement.
- 5.1.6.3 any subsequent decision by the Secretary of State to re-certify such an Agreement.
- 5.1.7 Where the Operator has entered into a Direct Participant Agreement in the Emissions Trading Scheme which covers emissions relating to the energy consumption of the activities, the Operator shall notify the Agency within one month of:-
- 5.1.7.1 a decision by the Operator to withdraw from or the Secretary of State to terminate that agreement.
- 5.1.7.2 a failure to comply with an annual target under that Agreement at the end of the trading compliance period.

## 6 Interpretation

6.1.1 In this Permit, the following expressions shall have the following meanings:-

*“Abatement equipment”* means that equipment dedicated to the removal of polluting substances from releases from the Installation to air or water media.

*“Abnormal operation”* means any technically unavoidable stoppages, disturbances, or failures of the abatement plant or the measurement devices, during which the concentrations in the discharges into air and the purified waste water of the regulated substances may exceed the normal emission limit values.

*“Annual release”* means the total release during any calendar year commencing 1 January

*“APC residues”* means air pollution control residues

*“Application”* means the application for this Permit, together with any response to a notice served under Schedule 4 to the PPC Regulations and any other information formally accepted by the Agency as being part of the Application

*“background concentration”* means such concentration of that substance as is present in:

- water supplied to the site; or
- where more than 50% of the water used at the site is directly abstracted from ground or surface water on site, the abstracted water; or
- where the Permitted Installation uses no significant amount of supplied or abstracted water, the precipitation on to the site.

*“BAT”* means best available techniques means the most effective and advanced stage of development of activities and their methods of operation which indicates the practical suitability of particular techniques to prevent and where that is not practicable to reduce emissions and the impact on the environment as a whole. For these purposes: “available techniques” means “those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the Operator”; “best” means “in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole” and “techniques” “includes both the technology used and the way in which the Installation is designed, built, maintained, operated and decommissioned.” . In addition, Schedule 2 of the PPC Regulations has effect in relation to the determination of BAT.

*“Bi-annual”* means twice per year with at least five months between tests;

*“Bottom Ash”* means ash falling through the grate or transported by the grate;

*“CEM”* Continuous emission monitor

*“CEN”* means Comité Européen de Normalisation

*“Commissioning”* relates to the period after construction has been completed or when a modification has been made to the plant or the raw materials when the Permitted Installation process is being tested and modified to operate according to its design;

*“Controlled waters”* shall have the same meaning as in Part III of the Water Resources Act 1991;

*“Daily average”* for releases of substances to air means the average of valid half-hourly averages or 10 minute averages for CO over a calendar day during normal operation.

*“Dioxin and Furans”* means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

*“ELV”* means emission limit value.

“*Fugitive emission*” means an emission to air or water (including sewer) from the Permitted Installation which is not controlled by an emission or background concentration limit under conditions 2.2.1.3, 2.2.2.4, 2.2.2.5, 2.2.2.8 or 2.2.2.9 of this Permit.

“*Groundwater*” means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“*Incineration Line*” means all of the incineration equipment related to a common discharge to air location.

“*Infectious clinical waste*” means clinical waste incorporating substances containing viable micro-organisms or their toxins which are known or reliably believed to cause disease in man or other living organisms

“*ISO*” means International Standards Organisation.

“*Land Protection Guidance*” means the version of the Agency guidance note “H7 - Guidance on the Protection of Land under the PPC Regime: Application Site Report and Site Protection and Monitoring Programme”, including its appended templates for data reporting, which is current at the time of issue of the Permit.

“ $L_{Aeq,T}$ ” means the equivalent continuous A-weighted sound pressure level in dB determined over time period, T.

“ $L_{A90,T}$ ” means the A-weighted sound pressure level in dB exceeded for 90% of the time period, T.

“ $L_{AFmax}$ ” means the maximum A weighted sound level measurement in dB measured with a fast time weighting.

“*LOI*” means loss on ignition a technique used to determine the combustible material by heating the ash residue to a high temperature

“*MCERTS*” means the Environment Agency’s Monitoring Certification Scheme.

“*Monitoring*” includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.

“*PAH*” means Poly-cyclic aromatic hydrocarbon, and comprises Anthanthrene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[b]naph(2,1-d)thiophene, Benzo[c]phenanthrene, Benzo[ghi]perylene, Benzo[a]pyrene, Cholanthrene, Chrysene, Cyclopenta[c,d]pyrene, Dibenzo[ah]anthracene, Dibenzo[a,i]pyrene Fluoranthene, Indo[1,2,3-cd]pyrene, Naphthalene

“*PCB*” means Polychlorinated Biphenyl. Dioxin-like PCBs are the non-ortho and mono-ortho PCBs listed in condition 6.1.5

“*Permitted Installation*” means the activities and the limits to those activities described in Table 1.1.1 of this Permit.

“*PPC Regulations*” means the Pollution, Prevention and Control (England and Wales) Regulations SI 2000 No.1973 (as amended) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit save to the extent they are specifically defined in this Permit.

“ $PM_{10}$ ,  $PM_{2.5}$ ,  $PM_{1.0}$ ,” mean respectively those particulates which have mean particle diameters of 10, 2.5 and 1.0 microns ( $\mu\text{m}$ )

“*Quarterly*” for reporting/sampling means after/during each 3 month period, January to March; April to June; July to September and October to December and, when sampling, with at least 2 months between each sampling date.



“Sewer” means sewer within the meaning of section 219(1) of the Water Industry Act 1991.

“Shutdown” is any period where the plant is being returned to a non-operational state and begins when waste is no longer being fed to the incinerator and auxiliary burners are required to maintain temperature.

“Staff” includes employees, directors or other officers of the Operator, and any other person under the Operator’s direct or indirect control, including contractors.

“Start-up” is any period, where the plant has been non-operational, after igniting the auxiliary burner and achieving the operational conditions in this Permit and is complete when the grate is loaded with waste, combustion is stable and the auxiliary burners have been switched off.

“TOC” means Total Organic Carbon. In respect of releases to air, this means the gaseous and vaporous organic substances, expressed as TOC. In respect of Bottom Ash, this means the total carbon content of all organic species present in the ash (excluding carbon in elemental form).

“Waste oil” has the same meaning as in Directive 75/439/EEC

“WHO” means the World Health Organisation

“Year” means calendar year ending 31 December.

“Waste Incineration Directive” means Directive 2000/76/EC on the incineration of waste (O.J.L 332, 28.12.2000).

- 6.1.2 Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.
- 6.1.3 Unless otherwise stated, any references in this Permit to concentrations of substances in emissions into air means:-
  - 6.1.3.1 in relation to gases from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels (including waste oil), 6% dry for solid fuels; and/or
  - 6.1.3.2 in relation to gases from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content
  - 6.1.3.3 in relation to gases from incineration plants other than those burning waste oil, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry.
  - 6.1.3.4 where hazardous wastes are burned in an incineration or co-incineration plant and the emissions of pollutants are reduced by gas treatment, standardisation of the gas with respect to oxygen content shall be carried out only if the oxygen concentration measured over the same period exceeds the relevant oxygen content defined in conditions 6.1.3.1 – 6.1.3.3 above. In other cases, the measured emissions shall be standardised only for moisture, pressure and temperature.
- 6.1.4 Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the wording of the document(s) with the most recent date shall prevail to the extent of such conflict.
- 6.1.5 For dioxins/furans and dioxin-like PCBs the determination of the toxic equivalence concentration (I-TEQ, & WHO-TEQ for dioxins/furans, WHO-TEQ for dioxin-like PCBs) stated as a release limit and/or reporting requirement, the mass concentrations of the following congeners have to be multiplied with their respective toxic equivalence factors before summing.

TEQ schemes for dioxins and furans				
Congener	I-TEQ(1990)	WHO-TEQ (1997/8)		
		Humans / Mammals	Fish	Birds
<i>Dioxins</i>				
<b>2,3,7,8-TCDD</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>1,2,3,7,8-PeCDD</b>	<b>0.5</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>1,2,3,4,7,8-HxCDD</b>	<b>0.1</b>	<b>0.1</b>	<b>0.5</b>	<b>0.05</b>
<b>1,2,3,6,7,8-HxCDD</b>	<b>0.1</b>	<b>0.1</b>	<b>0.01</b>	<b>0.01</b>
<b>1,2,3,7,8,9-HxCDD</b>	<b>0.1</b>	<b>0.1</b>	<b>0.01</b>	<b>0.1</b>
<b>1,2,3,4,6,7,8-HpCDD</b>	<b>0.01</b>	<b>0.01</b>	<b>0.001</b>	<b>&lt;0.001</b>
<b>OCDD</b>	<b>0.001</b>	<b>0.0001</b>	<b>-</b>	<b>-</b>
<i>Furans</i>				
<b>2,3,7,8-TCDF</b>	<b>0.1</b>	<b>0.1</b>	<b>0.05</b>	<b>1</b>
<b>1,2,3,7,8-PeCDF</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.1</b>
<b>2,3,4,7,8-PeCDF</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>1</b>
<b>1,2,3,4,7,8-HxCDF</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<b>1,2,3,7,8,9-HxCDF</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<b>1,2,3,6,7,8-HxCDF</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<b>2,3,4,6,7,8-HxCDF</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
<b>1,2,3,4,6,7,8_HpCDF</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>1,2,3,4,7,8,9-HpCDF</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>
<b>OCDF</b>	<b>0.001</b>	<b>0.0001</b>	<b>0.0001</b>	<b>0.0001</b>

TEQ schemes for dioxin-like PCBs			
Congener	WHO-TEQ (1997/8)		
	Humans / mammals	Fish	Birds
<i>Non-ortho PCBs</i>			
<b>3,4,4',5-TCB (81)</b>	<b>0.0001</b>	<b>0.0005</b>	<b>0.1</b>
<b>3,3',4,4'-TCB (77)</b>	<b>0.0001</b>	<b>0.0001</b>	<b>0.05</b>
<b>3,3',4,4',5 - PeCB (126)</b>	<b>0.1</b>	<b>0.005</b>	<b>0.1</b>
<b>3,3',4,4',5,5'-HxCB(169)</b>	<b>0.01</b>	<b>0.00005</b>	<b>0.001</b>

<i>Mono-ortho PCBs</i>			
<b>2,3,3',4,4'-PeCB (105)</b>	<b>0.0001</b>	<b>&lt;0.0000 05</b>	<b>0.0001</b>
<b>2,3,4,4',5-PeCB (114)</b>	<b>0.0005</b>	<b>&lt;0.0000 05</b>	<b>0.0001</b>
<b>2,3',4,4',5-PeCB (118)</b>	<b>0.0001</b>	<b>&lt;0.0000 05</b>	<b>0.00001</b>
<b>2',3,4,4',5-PeCB (123)</b>	<b>0.0001</b>	<b>&lt;0.0000 05</b>	<b>0.00001</b>
<b>2,3,3',4,4',5-HxCB (156)</b>	<b>0.0005</b>	<b>&lt;0.0000 05</b>	<b>0.0001</b>
<b>2,3,3',4,4',5'-HxCB (157)</b>	<b>0.0005</b>	<b>&lt;0.0000 05</b>	<b>0.0001</b>
<b>2,3',4,4',5,5'-HxCB (167)</b>	<b>0.00001</b>	<b>&lt;0.0000 05</b>	<b>0.00001</b>
<b>2,3,3',4,4',5,5'-HpCB (189)</b>	<b>0.0001</b>	<b>&lt;0.0000 05</b>	<b>0.00001</b>

# Schedule 1 - Notification of abnormal emissions

## (Including abnormal operations)

This page outlines the information that the Operator must provide to satisfy conditions 5.1.1 and 5.1.2 of this Permit.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the PPC Regulations.

### Part A

Permit Number	
Name of Operator	
Location of Installation	
Location of the emission	
Time and date of the emission	

Substance(s) emitted	Media	Best estimate of the quantity or the rate of emission	Time during which the emission took place

Measures taken, or intended to be taken, to stop the emission	
---------------------------------------------------------------	--

### Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment or harm which has been or may be caused by the emission	
The dates of any unauthorised emissions from the Installation in the preceding 24 months.	

## Part C

Permit Number	
Name of Operator	
Location of Installation	

For multi-line plants, indicate which line(s) was (were) subject to abnormal operation.								
Time at which abnormal operation commenced								
Time at which abnormal operation ceased								
Duration of this incidence of abnormal operation								
Cumulative abnormal operation duration in current year (at end of present incidence)								
Reasons for abnormal operation								
How did the abnormal operation end? (e.g. plant repaired, reaching maximum permitted duration, initiation of shutdown, etc.)								
Where the abnormal operation was caused by the failure of the particulate, CO or TOC CEM, attach a copy of the alternate monitoring data which was used to demonstrate compliance with the abnormal operation emission limit values.								
Where abatement plant has failed, give the half-hourly average emissions for pollutants of relevance during the abnormal operation in the rows below								
Pollutant	1 <sup>st</sup> ½ hour	2 <sup>nd</sup> ½ hour	3 <sup>rd</sup> ½ hour	4 <sup>th</sup> ½ hour	5 <sup>th</sup> ½ hour	6 <sup>th</sup> ½ hour	7 <sup>th</sup> ½ hour	8 <sup>th</sup> ½ hour

Name*	
Post	
Signature	
Date	

\* authorised to sign on behalf of Tyseley Waste Disposal Limited

## Schedule 2 - Reporting of monitoring data

Parameters for which reports shall be made, in accordance with conditions 4.1.2 and 4.1.3 of this Permit, are listed below.

<b>Table S2: Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission point</b>	<b>Reporting period</b>	<b>Period begins</b>
Sulphur dioxide	A1, A2.	Every 6 months	1 January 2006
Total Organic Carbon	A1, A2.	Every 6 months	1 January 2006
Oxides of nitrogen as NO <sub>2</sub>	A1, A2.	Every 6 months	1 January 2006
Hydrogen Chloride	A1, A2.	Every 6 months	1 January 2006
Hydrogen Fluoride	A1, A2.	Every 6 months	1 January 2006
Particulate matter	A1, A2.	Every 6 months	1 January 2006
Carbon Monoxide	A1, A2	Every 6 months	1 January 2006
Ammonia	A1, A2	Every 6 months	1 January 2006
Nitrous oxide (N <sub>2</sub> O)	A1, A2	Every 6 months	1 January 2006
Cadmium & thallium and their compounds (total)	A1, A2	Every 6 months	1 January 2006
Mercury and its compounds	A1, A2	Every 6 months	1 January 2006
Antimony, Arsenic, Lead, Chromium, Cobalt, Copper, Manganese, Nickel and Vanadium and their compounds (total)	A1, A2	Every 6 months	1 January 2006
Dioxins / furans (I-TEQ)	A1, A2	Every 6 months	1 January 2006
Dioxin-like PCBs (WHO-TEQ Humans/Mammals)	A1, A2	Every 6 months	1 January 2006
Dioxin-like PCBs (WHO-TEQ Fish)	A1, A2	Every 6 months	1 January 2006
Dioxin-like PCBs (WHO-TEQ Birds)	A1, A2	Every 6 months	1 January 2006
Dioxins/furans (WHO-TEQ Humans/Mammals)	A1, A2	Every 6 months	1 January 2006
Dioxins/furans (WHO-TEQ Fish)	A1, A2	Every 6 months	1 January 2006
Dioxins/furans (WHO-TEQ Birds)	A1, A2	Every 6 months	1 January 2006
Poly-cyclic aromatic hydrocarbons (PAH)	A1, A2	Every 6 months	1 January 2006
Temperature	A1, A2	As requested by Agency Site Inspector	1 January 2006
Pressure	A1, A2	As requested by Agency Site Inspector.	1 January 2006
Oxygen content	A1, A2	As requested by Agency Site Inspector.	1 January 2006
Water vapour content (unless gas is dried before analysis of emissions)	A1, A2	As requested by Agency Site Inspector.	1 January 2006
Mineral oils and hydrocarbons	W1	Every 12 months	1 January 2006

**Table S2: Reporting of monitoring data**

<b>Parameter</b>	<b>Emission point</b>	<b>Reporting period</b>	<b>Period begins</b>
Furnace Chamber Temperature	Line 1, Line 2 & CWI	As requested by Agency Site Inspector.	1 January 2006
Metals (Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	Bottom Ash	Every 6 months for combined sample from Lines 1 & 2.  Annually for individual sample from Line 1 & Line 2	1 January 2006
Loss on ignition (LOI )	Bottom Ash	Every 6 months for combined sample from Lines 1 & 2.  Annually for individual sample from Line 1 & Line 2	1 January 2006
Total soluble fraction and metals (Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	Bottom Ash	Before use of a new disposal or recycling route	1 January 2006
Metals (Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	APC Residues	Every 6 months for individual sample from Line 1 & Line 2	1 January 2006
Total soluble fraction and metals (Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	APC Residues	Before use of a new disposal or recycling route	1 January 2006
Wind Speed and Direction	Installation	As requested by Agency Site Inspector.	1 January 2006
Water usage	Installation	Every 12 months	1 January 2006
Energy usage	Installation	Every 12 months	1 January 2006
Waste disposal and/or recovery	Installation	Every 12 months	1 January 2006
Performance indicators	Installation	Every 12 months	1 January 2006

## Schedule 3 - Forms to be used

<b>Table S3: Reporting Forms</b>		
<b>Media or parameter</b>	<b>Form Number</b>	<b>Date of Form</b>
Air: Quarterly and bi-annual periodic monitored emissions	Agency Form / WP3239SJ / PER1/A1 Agency Form / WP3239SJ / PER1/A2	04 November 2005
Air: Continuously monitored emissions of particulate matter	Agency Form / WP3239SJ / PM/A1 Agency Form / WP3239SJ / PM/A2	04 November 2005
Air: Continuously monitored emissions of TOC	Agency Form / WP3239SJ / TOC/A1 Agency Form / WP3239SJ / TOC/A2	04 November 2005
Air: Continuously monitored emissions of Hydrogen chloride	Agency Form / WP3239SJ / HCL/A1 Agency Form / WP3239SJ / HCL/A2	04 November 2005
Air: Continuously monitored emissions of Carbon monoxide	Agency Form / WP3239SJ / CO/A1 Agency Form / WP3239SJ / CO/A2	04 November 2005
Air: Continuously monitored emissions of Sulphur dioxide	Agency Form / WP3239SJ / SO2/A1 Agency Form / WP3239SJ / SO2/A2	04 November 2005
Air: Continuously monitored emissions of Oxides of nitrogen	Agency Form / WP3239SJ / NOX/A1 Agency Form / WP3239SJ / NOX/A2	04 November 2005
Water: Annual periodic monitored emissions to water	Agency Form / WP3239SJ / W1	04 November 2005
Bottom Ash, APC Residues : Composition	Agency Form / WP3239SJ / ASH1 Agency Form / WP3239SJ / ASH2	04 November 2005
Bottom Ash, APC Residues : Solubility	Agency Form / WP3239SJ / ASH3	04 November 2005
Energy	Agency Form / WP3239SJ / EU1	04 November 2005
Waste disposal and recycling return	Agency Form / WP3239SJ / DR1	04 November 2005
Water usage	Agency Form / WP3239SJ / WU1	04 November 2005
Performance indicators	Agency Form / WP3239SJ / PP1	04 November 2005



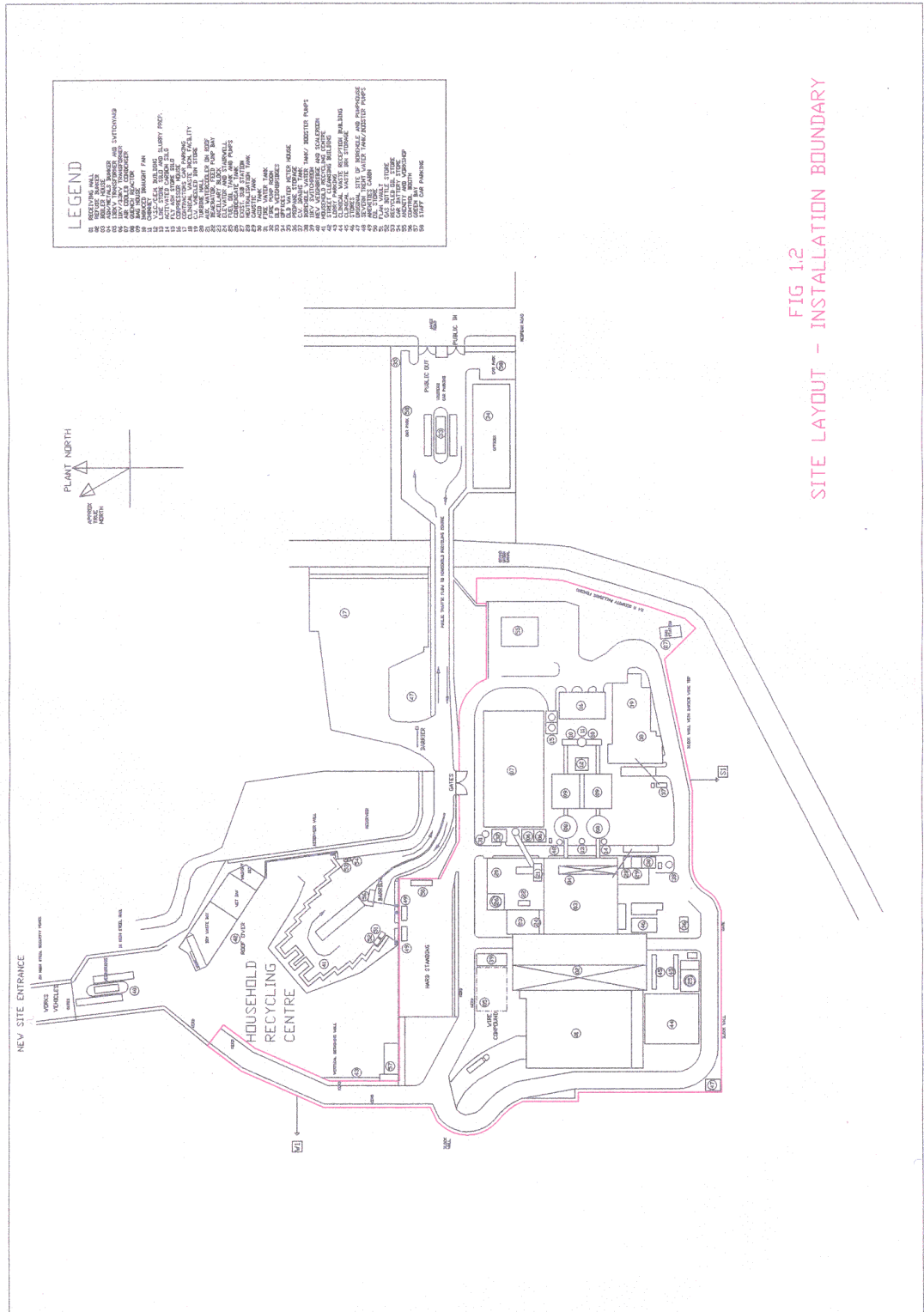
## Schedule 4 - Reporting of performance data

Data required to be recorded and reported by Condition 4.1.3. The data should be assessed at the frequency given and reported annually to the Agency.

<b>Table S4.1: Annual Production/Treatment</b>	
Total municipal waste incinerated (excluding separately collected fractions)	tonnes
Total other wastes Incinerated	tonnes
Electrical energy exported	KWhrs
Electrical energy used on installation	KWhrs

<b>Table S4.2: Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Performance indicator</b>
Electrical energy Imported to site	Quarterly	kWhrs / tonne of waste incinerated
Fuel oil consumption	Quarterly	kg/ tonne of waste incinerated
Mass of bottom ash produced	Quarterly	kg/ tonne of waste incinerated
Mass of APC residues produced	Quarterly	kg/ tonne of waste incinerated
Mass of other solid residues produced	Quarterly	kg/ tonne of waste incinerated
Ammonia consumption	Quarterly	kg/ tonne of waste incinerated
Activated carbon consumption	Quarterly	kg/ tonne of waste incinerated
Lime consumption	Quarterly	kg/ tonne of waste incinerated
Water consumption	Quarterly	m <sup>3</sup> / tonne of waste incinerated

# Schedule 5 - Site Plan



## Schedule 6 - List of Permitted Wastes

<b>Table S6.1 Permitted waste types and quantities for incineration via the main reception hall.</b>	
<b>Maximum quantity</b>	<b>The maximum throughput of each waste type is not to exceed the amount set out in table 2.1.2 of the permit.</b>
<b>Waste code</b>	<b>Description</b>
<b>02</b>	<b>WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 03	plant-tissue waste
02 01 07	wastes from forestry
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
02 02 03	materials unsuitable for consumption or processing
<b>02 03</b>	<b>wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation</b>
02 03 04	materials unsuitable for consumption or processing
<b>02 05</b>	<b>wastes from the dairy products industry</b>
02 05 01	materials unsuitable for consumption or processing
<b>02 06</b>	<b>wastes from the baking and confectionery industry</b>
02 06 01	materials unsuitable for consumption or processing
<b>02 07</b>	<b>wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)</b>
02 07 04	materials unsuitable for consumption or processing
<b>03</b>	<b>WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD</b>
<b>03 01</b>	<b>wastes from wood processing and the production of panels and furniture</b>
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
<b>04</b>	<b>WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES</b>
<b>04 02</b>	<b>wastes from the textile industry</b>
04 02 09	wastes from composite materials (impregnated textile, elastomer, plastomer)
04 02 15	wastes from finishing other than those mentioned in 04 02 14
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
<b>07</b>	<b>Waste from organic chemical processes</b>
<b>07 02</b>	<b>wastes from the MFSU of plastics, synthetic rubber and man-made fibres</b>
07 02 13	waste plastic
<b>07 05</b>	<b>wastes from the MFSU of pharmaceuticals</b>
07 05 14	solid wastes other than those mentioned in 07 05 13
<b>09</b>	<b>WASTES FROM THE PHOTOGRAPHIC INDUSTRY</b>
<b>09 01</b>	<b>wastes from the photographic industry</b>
09 01 10	single-use cameras without batteries
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
<b>15</b>	<b>WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging

**Table S6.1 Permitted waste types and quantities for incineration via the main reception hall.**

<b>Maximum quantity</b>	<b>The maximum throughput of each waste type is not to exceed the amount set out in table 2.1.2 of the permit.</b>
<b>Waste code</b>	<b>Description</b>
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 09	textile packaging
<b>15 02</b>	<b>absorbents, filter materials, wiping cloths and protective clothing</b>
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
<b>16 03</b>	<b>off-specification batches and unused products</b>
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 06	organic wastes other than those mentioned in 16 03 05
<b>16 05</b>	<b>gases in pressure containers and discarded chemicals</b>
16 05 05	gases in pressure containers other than those mentioned in 16 05 04
<b>18</b>	<b>WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)</b>
<b>18 01</b>	<b>wastes from natal care, diagnosis, treatment or prevention of disease in humans</b>
18 01 04	wastes whose collection and disposal is not subject to special requirements in order to prevent infection(for example dressings, plaster casts, linen, disposable clothing, diapers)
18 01 09	medicines other than those mentioned in 18 01 08
<b>18 02</b>	<b>wastes from research, diagnosis, treatment or prevention of disease involving animals</b>
18 02 06	chemicals other than those mentioned in 18 02 05
18 02 08	medicines other than those mentioned in 18 02 07
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 30	detergents other than those mentioned in 20 01 29
20 01 32	medicines other than those mentioned in 20 01 31
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 01	biodegradable waste
<b>20 03</b>	<b>other municipal wastes</b>
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 04	septic tank sludge
20 03 07	bulky waste

**Table S6.2 Permitted waste types and quantities for incineration plant via the main plant hoist. (note 1)**

<b>Maximum quantity</b>	<b>The maximum throughput of each waste type is not to exceed the amount set out in table 2.1.2 of the permit.</b>
<b>Waste code</b>	<b>Description</b>
<b>02</b>	<b>WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 02	animal-tissue waste
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
02 02 02	animal-tissue waste
<b>18</b>	<b>WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)</b>
<b>18 01</b>	<b>wastes from natal care, diagnosis, treatment or prevention of disease in humans</b>
18 01 03*	wastes whose collection and disposal is subject to special requirements in order to prevent infection
18 01 04	wastes whose collection and disposal is not subject to special requirements in order to prevent infection(for example dressings, plaster casts, linen, disposable clothing, diapers)
<b>18 02</b>	<b>wastes from research, diagnosis, treatment or prevention of disease involving animals</b>
18 02 02*	wastes whose collection and disposal is subject to special requirements in order to prevent infection
18 02 03	wastes whose collection and disposal is not subject to special requirements in order to prevent infection
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 99	other fractions not otherwise specified (drug abuse litter only)

Note 1: Wastes specified in table S6.1 above may also be routed through the main plant hoist.

**Table S6.3 Permitted waste types and quantities for clinical waste incinerator.  
(Note 2)**

Maximum quantity	The maximum throughput of each waste type is not to exceed the amount set out in table 2.1.2 of the permit.
Waste code	Description
<b>03</b>	<b>WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD</b>
<b>03 01</b>	<b>wastes from wood processing and the production of panels and furniture</b>
03 01 04*	sawdust, shavings, cuttings, wood, particle board and veneer containing dangerous substances
<b>04</b>	<b>WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES</b>
<b>04 02</b>	<b>wastes from the textile industry</b>
04 02 14*	wastes from finishing containing organic solvents
04 02 16*	dye stuffs and pigments containing dangerous substances
<b>07</b>	<b>WASTES FROM ORGANIC CHEMICAL PROCESSES</b>
<b>07 01</b>	<b>wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals</b>
07 01 03*	organic halogenated solvents, washing liquids and mother liquors
07 01 04*	other organic solvents, washing liquids and mother liquors
07 01 09*	halogenated filter cakes and spent absorbents
07 01 10*	other filter cakes and spent absorbents
<b>07 02</b>	<b>wastes from the MFSU of plastics, synthetic rubber and man-made fibres</b>
07 02 03*	organic halogenated solvents, washing liquids and mother liquors
07 02 04*	other organic solvents, washing liquids and mother liquors
07 02 09*	halogenated filter cakes and spent absorbents
07 02 10*	other filter cakes and spent absorbents
<b>07 03</b>	<b>wastes from the MFSU of organic dyes and pigments (except 06 11)</b>
07 03 03*	organic halogenated solvents, washing liquids and mother liquors
07 03 04*	other organic solvents, washing liquids and mother liquors
07 03 09*	halogenated filter cakes and spent absorbents
07 03 10*	other filter cakes and spent absorbents
<b>07 04</b>	<b>wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides</b>
07 04 03*	organic halogenated solvents, washing liquids and mother liquors
07 04 04*	other organic solvents, washing liquids and mother liquors
07 04 09*	halogenated filter cakes and spent absorbents
07 04 10*	other filter cakes and spent absorbents
07 04 13*	solid wastes containing dangerous substances
<b>07 05</b>	<b>wastes from the MFSU of pharmaceuticals</b>
07 05 03*	organic halogenated solvents, washing liquids and mother liquors
07 05 04*	other organic solvents, washing liquids and mother liquors
07 05 09*	halogenated filter cakes and spent absorbents
07 05 10*	other filter cakes and spent absorbents
07 05 13*	solid wastes containing dangerous substances
07 05 14	solid wastes other than those mentioned in 07 05 13
<b>07 06</b>	<b>wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics</b>
07 06 03*	organic halogenated solvents, washing liquids and mother liquors
07 06 04*	other organic solvents, washing liquids and mother liquors
07 06 09*	halogenated filter cakes and spent absorbents
07 06 10*	other filter cakes and spent absorbents

**Table S6.3 Permitted waste types and quantities for clinical waste incinerator.  
(Note 2)**

<b>Maximum quantity</b>	<b>The maximum throughput of each waste type is not to exceed the amount set out in table 2.1.2 of the permit.</b>
<b>Waste code</b>	<b>Description</b>
<b>07 07</b>	<b>wastes from the MFSU of fine chemicals and chemical products not otherwise specified</b>
07 07 03*	organic halogenated solvents, washing liquids and mother liquors
07 07 04*	other organic solvents, washing liquids and mother liquors
07 07 09*	halogenated filter cakes and spent absorbents
07 07 10*	other filter cakes and spent absorbents
<b>09</b>	<b>WASTES FROM THE PHOTOGRAPHIC INDUSTRY</b>
<b>09 01</b>	<b>wastes from the photographic industry</b>
09 01 11*	single-use cameras containing batteries included in 16 06 01, 16 06 02 or 16 06 03
<b>15</b>	<b>WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 10*	packaging containing residues of or contaminated by dangerous substances
<b>15 02</b>	<b>absorbents, filter materials, wiping cloths and protective clothing</b>
15 02 02*	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 03</b>	<b>off-specification batches and unused products</b>
16 03 03*	inorganic wastes containing dangerous substances
16 03 05*	organic wastes containing dangerous substances
<b>16 05</b>	<b>gases in pressure containers and discarded chemicals</b>
16 05 04*	gases in pressure containers (including halons) containing dangerous substances
<b>18</b>	<b>WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)</b>
<b>18 01</b>	<b>wastes from natal care, diagnosis, treatment or prevention of disease in humans</b>
18 01 01	sharps (except 18 01 03)
18 01 02	Body parts and organs including blood bags and blood preserves (except 18 01 03)
18 01 03*	wastes whose collection and disposal is subject to special requirements in order to prevent infection
18 01 06*	chemicals consisting of or containing dangerous substances
18 01 08*	cytotoxic and cytostatic medicines
<b>18 02</b>	<b>wastes from research, diagnosis, treatment or prevention of disease involving animals</b>
18 02 01	sharps (except 18 02 02)
18 02 02*	wastes whose collection and disposal is subject to special requirements in order to prevent infection
18 02 05*	chemicals consisting of or containing dangerous substances
18 02 07*	cytotoxic and cytostatic medicines
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 26*	oil and fat other than those mentioned in 20 01 25
20 01 27*	paint, inks, adhesives and resins containing dangerous substances
20 01 29*	detergents containing dangerous substances
20 01 31*	cytotoxic and cytostatic medicines

**Table S6.3 Permitted waste types and quantities for clinical waste incinerator.  
(Note 2)**

<b>Maximum quantity</b>	<b>The maximum throughput of each waste type is not to exceed the amount set out in table 2.1.2 of the permit.</b>
<b>Waste code</b>	<b>Description</b>
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components ( 6 )
20 01 37*	wood containing dangerous substances

Note 2: Wastes specified in tables S6.1 and S6.2 above may also be burned in the clinical waste incinerator plant.

**END OF PERMIT**