

# Variation Notice with introductory note

Pollution Prevention and Control Regulations 2000

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**Sheffield Energy  
Recovery Facility  
Onyx Sheffield Ltd  
Bernard Road  
Sheffield  
South Yorkshire  
S4 7YX**

Variation Notice number

PP3332SL

Permit number

BM4082

# Introductory note

## **This introductory note does not form a part of the Variation Notice.**

The following Notice is issued under Regulation 17 of The Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I.2000 No. 1973 (as amended) (the "Regulations") to vary the conditions of Permit number BM4082 (the "Permit") issued under the Regulations to operate an Incineration installation (the "Installation").

The Notice comprises: Schedule 1 containing conditions to be deleted; Schedule 2 conditions to be amended; and Schedule 3 conditions to be added. The Notice is subject to the express conditions set out in Schedules 1 to 3.

The Permit, as amended by this Variation Notice, contains conditions which have to be complied with. It should be noted that aspects of the operation of the Installation which are not regulated by those conditions are subject to the condition implied by Regulation 12(10) of the Regulations, that the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the Installation. Techniques include both the technology used and the way in which the Installation is designed, built, maintained, operated and decommissioned.

This variation is to comply with the requirements of the Waste Incineration (England and Wales) Regulations 2002 (SI 2002 No. 2980) (The WI Regulations) and the Pollution Prevention and Control (Waste Incineration Directive) (England and Wales) Direction 2002, which together implement the requirements of the Waste Incineration Directive (Directive EC 2000/76/EC on the Incineration of Waste (WID)). The Installation regulated under this Permit contains a new Waste Incineration Installation (as defined in the WI Regulations) in which the incineration of waste in an incineration plant is carried out. Conditions delivering the corresponding requirements of the relevant articles of the Waste Incineration Directive have been incorporated into this variation to the Permit.

### **Reason for Variation**

The purpose of this variation to the Permit is to ensure that the permission includes all those requirements of the Waste Incineration Regulations which are applicable to this installation. A consolidated permit has been provided for clarity.

### **Brief description of the Installation regulated by this permit**

The main purpose of the activity at the Installation is to burn mixed municipal waste and to recover energy in the form of heat for export to the district heating scheme and to generate electricity for export to the national grid. The Installation is replacing an existing municipal waste incinerator, which is currently authorised under Integrated Pollution Control (IPC).

The IPC authorised incinerator will be demolished following commissioning of the new Installation. The Installation covers the entire incineration plant, including the incineration line, waste reception, storage, on-site pre-treatment facilities, waste fuel and air supply systems, boiler, facilities for the treatment of exhaust gases, on-site facilities for treatment and storage of residues and waste water, stack, devices and systems for controlling incineration operations, recording and monitoring conditions.

The Installation has a design capacity of 28 tonnes per hour, which equates to 225,000 tonnes per annum at 8000 hours operation per annum. The thermal capacity of the grate is such that waste hourly throughput will vary between 16.8 and 28.0 tonnes per hour, depending upon the calorific value of the waste. There is one incineration line. The incineration process will generate a maximum of approximately 39 MWth of heat for export to the district heating scheme and 17.5 MW of electricity for export to the national grid.

### **Raw Materials**

Waste is delivered to the plant in covered vehicles. These are first weighed before proceeding to the tipping hall. This is a building, maintained under slight negative pressure to ensure that any odours, dust or litter escaping from the building are minimised. The vehicles tip into a waste storage pit from where a grab transfers waste to the feed hopper of the combustion plant. The grab is also used to homogenise the waste and to remove any unsuitable or non-combustible items and oversize items (items not suitable for incineration) as far as is practicable.

Hydrated lime for the flue gas cleaning process is delivered by bulk road tanker and offloaded pneumatically into a silo fitted with a dust filter.

Activated carbon for the flue gas cleaning process is delivered by bulk road tanker and off-loaded pneumatically into a silo fitted with a dust filter.

Solid urea for the flue gas cleaning process is delivered in bulk bags. A dedicated emptying station feeds the urea preparation and injection process.

Various water treatment chemicals are delivered in proprietary containers and stored in the appropriate contained areas.

A bunded fuel oil tank provides fuel oil for the site vehicles.

Various other materials including maintenance materials (oils, greases, insulants, antifreezes, welding and fire fighting gases) are stored in the appropriate manner.

### **Combustion Process**

The incinerator hearth, an inclined reciprocating grate bar design, promotes continuous mixing of the waste and hence promotes good combustion. As the waste enters the incinerator, it passes through a drying zone, followed by a combustion zone and a burnout zone. Combustion air is extracted from within the tipping hall. Primary air is fed in below the waste through the grate bars and secondary air is injected above the waste mass to promote mixing for good combustion.

Urea is injected into the combustion gas path to react with the oxides of nitrogen, chemically reducing them to nitrogen and water.

Auxiliary natural gas burners are fitted for start-up sequencing and to maintain temperatures above 850°C for 2 seconds at 6% oxygen. The oxygen concentration and temperature are carefully controlled to promote combustion of organic matter.

Ash from the grate ("Bottom Ash") is discharged from the lower end of the grate into a water filled quench pit. It is then removed from the quench pit by conveyor, to a Bottom Ash storage area located within the main incinerator building prior to off-site disposal. Ferrous metals are removed by magnetic separator and stored separately prior to recycling off-site. Liquids collected from the Bottom Ash and ferrous storage areas are returned to the ash quench pit.

### **Energy Recovery**

The proposed incinerator will operate as a combined heat and power plant generating both electricity and supplying heat to an existing district heating scheme. Such a plant ranks more highly in the Government's Waste Strategy 2000 than an incinerator without the benefit of energy recovery.

Hot gases arising from the combustion of waste pass through a steam generator (boiler) consisting of a series of heat exchangers, which remove heat, from the gas stream to evaporate water and hence generate steam. The heat recovery system will rapidly reduce the waste gas temperature through the temperature range at which dioxins and furans can form thus inhibiting their formation.

Steam from the heat recovery boiler is fed to a steam turbine driven generator, which will supply electricity to the National Grid. Pass out steam from the turbine, together with surplus steam from the boiler, can be used for heating water supplied to the District heating Scheme.

Water for steam generation is taken from a town's water main and is treated prior to use in the boiler. Exhaust steam from the turbine and steam is used to heat water in the District Heating Scheme. Surplus steam can also be condensed in air-cooled condensers and the condensate returned to the boiler.

Soot blowing facilities are included to remove particulate matter fouling the boiler tubes and feeding this material into the Bottom Ash collecting system.

### **Gas Cleaning**

Urea solution is injected into the combustion gas path within the boiler to reduce the formation of oxides of nitrogen ("NO<sub>x</sub>"). Downstream of the boiler, lime is injected to neutralise acid gases and activated carbon is injected to absorb (primarily) dioxins, furans and dioxin-like PCBs ("PCBs"), volatile organic compounds ("VOCs") and mercury. The lime injection rate is controlled, in relation to the measurement of acid gases to optimise the efficiency of gas scrubbing and lime usage. Lime usage is further optimised by the use of the emission monitoring system control and the recirculation of spent lime.

NO<sub>x</sub> abatement is achieved by the use of both controlled air combustion techniques in the combustion chamber and selective non-catalytic reduction ("SNCR"). The SNCR is based on the injection of urea solution into the gas combustion stream before the lime and carbon injection and before the gas passes to bag filters.

Bag filters remove particulate matter carried with the combustion gases, including lime which has been injected upstream of the bag filter. Pulses of compressed air are used to remove the accumulated particulate ("APC Residues") from the bags. The APC Residues fall into a collection hopper and are then conveyed to a storage silo.

The cleaned gas then discharges to atmosphere via a 76 metre stack at an efflux velocity in excess of 15 m sec<sup>-1</sup> at maximum throughput.

### **Ancillary Operations**

Demineralised water is required to compensate for steam system losses. An ion exchange demineralisation plant provides the make-up water. The ion exchange resins are regenerated using sodium hydroxide and hydrochloric acid and the regeneration effluent is routed to the water treatment plant, with the boiler blowdown and other process effluent, for treatment prior to reuse within the Installation.

### **Ash Handling and Disposal**

Bottom Ash and APC Residues are sent separately for disposal or recovery, off site, by licensed contractors, subject to waste licensing legislation. The Operator is investigating options for the reuse and recycling of the ash. The ferrous metals are sent for recovery off site by licensed contractors subject to waste licensing legislation. The Bottom Ash will be periodically monitored to ensure effective burn out is being achieved. All other solid waste residues arising from the operation of the process will be removed from site for disposal by suitable contractors.

All APC Residues will be transported and handled within enclosed systems.

### **Liquid Effluent and Site Drainage**

All effluent (including excess rainwater) arising from the Installation, which cannot be recycled, will be discharged to sewer.

### **Emissions Monitoring**

Emissions from the stack are continuously monitored for:- particulate, carbon monoxide (CO), ammonia (NH<sub>3</sub>), sulphur dioxide (SO<sub>2</sub>), hydrogen chloride (HCl), oxygen (O<sub>2</sub>), oxides of nitrogen (NO and NO<sub>2</sub> expressed as NO<sub>2</sub>) and volatile organic compounds (VOCs as Total Organic Carbon ("TOC")). In addition periodic measurements will be carried out for hydrogen fluoride (HF), metals (cadmium (Cd), thallium (Tl), mercury (Hg), antimony (Sb), arsenic (As), lead (Pb), chromium (Cr), cobalt (Co), copper (Cu), manganese (Mn), nickel (Ni), vanadium (V)), dioxins/furans, PCBs, and nitrous oxide (N<sub>2</sub>O). The frequency for periodic measurements are specified in the Permit.

In addition, the flue gas flow will be monitored continuously to facilitate monthly tests to determine the monthly release of pollutants.

#### **Other PPC Permits relating to this Installation**

| Permit holder | Permit Number | Date of Issue |
|---------------|---------------|---------------|
|---------------|---------------|---------------|

|      |  |  |
|------|--|--|
| None |  |  |
|------|--|--|

#### **Superseded Licenses/Consents/Authorisations relating to this Installation**

| Holder | Reference Number | Date of Issue |
|--------|------------------|---------------|
|--------|------------------|---------------|

|      |  |  |
|------|--|--|
| None |  |  |
|------|--|--|

## Talking to us

If you contact the Agency about this Permit please quote the Permit Number.

The Operator should use the Emergency Hotline telephone number (0800 80 70 60) or any other number notified to it to give a notification under condition 5.1.1 of the Permit.

## Confidentiality

The Permit/Variation requires the Operator to provide information to the Agency. The Agency will place the information onto the public registers in accordance with the requirements of the PPC Regulations. If the Operator considers that any information provided is commercially confidential, it may apply to the Agency to have such information withheld from the register as provided in the PPC Regulations. To enable the Agency to determine whether the information is commercially confidential, the Operator should clearly identify the information in question and should specify clear and precise reasons.

## Variations to the permit

This Permit may be varied in the future. The Status Log within the Introductory Note to any such variation will include summary details of the Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

## Surrender of the permit

Before this Permit can be wholly or partially surrendered, an application to surrender the Permit has to be made. For the applicant to be successful, they would have to be able to demonstrate to the Agency, in accordance with Regulation 19 of the PPC Regulations, that there is no pollution risk and that no further steps are required to return the site to a satisfactory state.

## Transfer of the permit or part of the permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 18 of the PPC Regulations. A transfer will be allowed unless the Agency considers that the proposed holder will not be the person who will have control over the operation of the Installation or will not ensure compliance with the conditions of the transferred Permit. If the Permit authorises the carrying out of a specified waste management activity, then there is a further requirement that the transferee is considered to be a "fit and proper person" to carry out that activity.

## Status Log

| <b>Detail</b>                       | <b>Date</b>            | <b>Comment</b>   |
|-------------------------------------|------------------------|--|
| Application BM4082                  | Received 10/12/01      |  |
| Response to request for information | Request dated 05/03/02 | Response dated 03/05/02  |
| Further Information                 | Received 10/05/02      | Methodology for soil sampling  |
| Further Information                 | Received 13/06/02      | Summary of air dispersion sensitivity analysis and comparison of annual average NO <sub>x</sub> concentrations with existing plant.                |
| Further Information                 | Received 14/06/02      | Comments on use of FGR   |
| Further Information                 | Received 17/06/02      | Clarification of site plan, CFD analysis, combustion temperature, sample point standards, energy factors, emissions of chromium.                   |
| Further Information                 | Received 17/06/02      | Clarification of use of raw materials, use of carbon monoxide monitoring, FGR, surface water drainage, background noise monitoring                 |
| Further Information                 | Received 05/08/02      | Assessment of metal deposition rates   |
| Further Information                 | Received 22/08/02      | Change of registered office address  |
| Further Information                 | Received 27/08/02      | Clarification of HF monitoring, fuel oil storage conditions, feedstock waste definitions, incorporation of formal environmental management system. |
| Permit BM4082                       | Determined 04/09/02    |  |
| Variation Application Received      | Received 16/03/05      | WIR variation  |
| Variation PP3332SL                  | Determined 21/12/05    | Consolidated permit issued   |

*End of introductory Note*

**Variation Notice**

Pollution Prevention and Control  
(England and Wales) Regulations 2000



**ENVIRONMENT  
AGENCY**

## Variation Notice

Permit number

BM4082 (the "Permit")

Variation Notice number

**PP3332SL**

The Environment Agency in exercise of its powers under Regulation 17 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I. 2000 No. 1973) (as amended) (the "Regulations"), hereby varies the Permit held by **Onyx Sheffield Ltd]** (the "Operator"),

Whose Registered Office is

**Onyx House,  
154a Pentonville Road,  
London  
N1 9PE**

**Company registration number 3709317**

which relates to the operation of the Installation at

**Sheffield Energy Recovery Facility  
Bernard Road  
Sheffield  
South Yorkshire  
S4 7YX  
(the "Installation")**

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

Signed

Authorised to sign on behalf of the Environment Agency

Date

## **SCHEDULE 1 - CONDITIONS TO BE DELETED**

1. All the conditions in Parts 1 to 11 and schedules 1 to 3 of Permit Number BM4082

## **SCHEDULE 2 - CONDITIONS TO BE AMENDED**

1. None

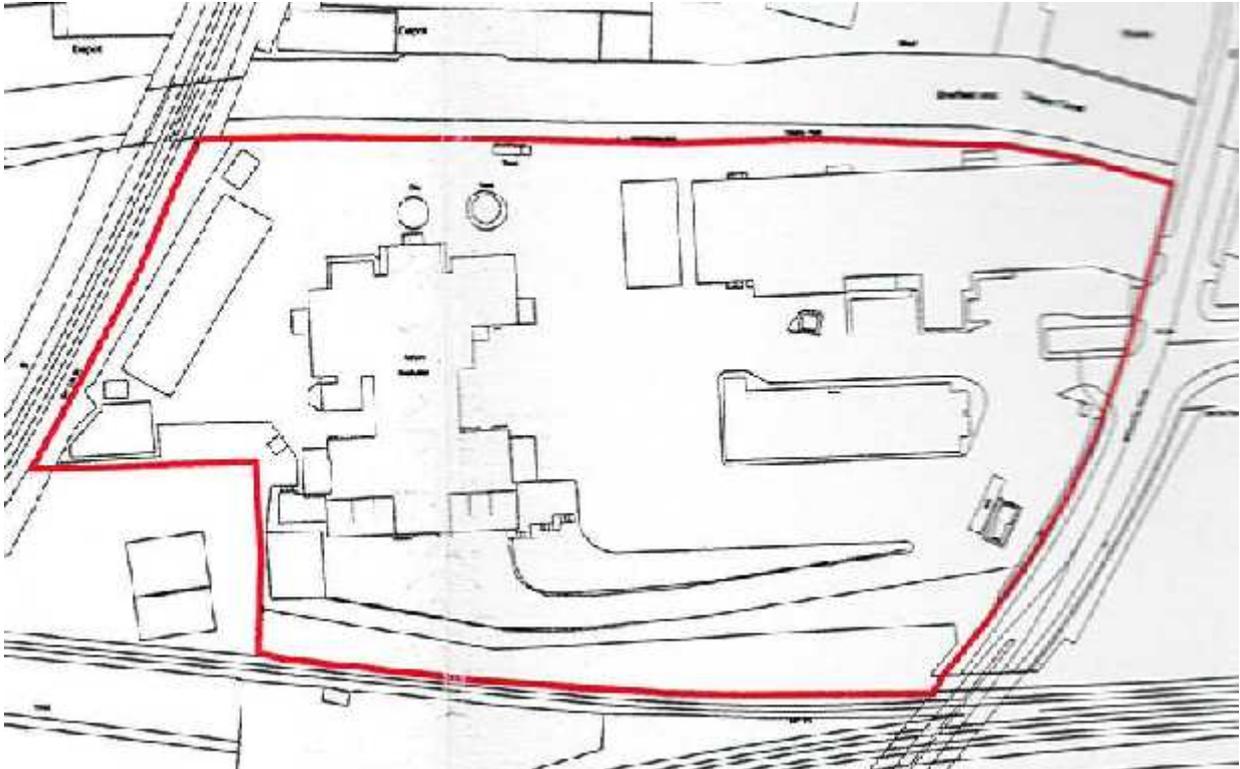
## SCHEDULE 3 CONDITIONS TO BE ADDED

### 1 The permitted installation

1.1.1 The Operator is authorised to carry out the activities and/or the associated activities specified in Table 1.1.1.

| <b>Table 1.1.1</b>   |   |  |  |
|--|---|--|--|
| <b>Activity under Schedule 1 of the Regulations/ Associated Activity</b>     | <b>Description of specified activity</b>  | <b>Schedule 1 Activity Reference (if applicable)</b> | <b>Limits of specified activity</b>  |
| Receipt and storage of municipal waste                                       | Receive waste at the Installation boundary and storage prior to incineration                              | 5.1 A (1)(c)   | Receipt of waste and storage for incineration  |
| Incineration of municipal waste  | Feedstock management, combustion operations, gas cleaning and discharge.                                  |  | From feedstock management and selection to point of discharge to the environment                     |
| Production of steam for generation of heat and electricity and off site use. | Steam generation, Turbine generator operation. District Heating Scheme operation within the Installation. |  | From incinerator to:<br><br>output to district heating scheme;<br><br>output to grid of electricity. |
| Abatement of flue gas  | Lime and activated carbon injection. Urea injection. Bag filter abatement.                                |  | From incinerator to release point A1   |
| Management of Bottom Ash and APC residues                                    | Residues, handling and storage  |  | Including loading and storage on off-site transfer vehicles as far as site boundary.                 |
| Water discharges to foul sewer.  | Discharge of waste waters from process to foul sewer  |  | From incinerator to foul sewer   |

1.1.2 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the area shown edged in red on the plan below



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## Operational Matters

### 2.1 Management techniques and control

2.1.1 The Permitted Installation shall, subject to the conditions of this Permit, be managed and controlled as described in the documentation specified in Table 2.1.1, or as otherwise agreed in writing by the Agency.

**Table 2.1.1 : Management and control**

| Description  | Parts  | Date Received |
|--|--|---------------|
| Application  | The response to question 2.1 given in section 4 of the application | 10/12/01      |
| Response to Schedule 4 Part 1 Notice issued 05/03/02 | Response to questions 3, 19 and 20                                 | 03/05/02      |
| Further Information                                  | Headed 'Environmental Management System'                           | 27/08/02      |

2.1.2 All plant, equipment and technical means used in operating the Permitted Installation shall be maintained in good operating condition.

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

2.1.4 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.

2.1.5 All Staff shall be fully conversant with those aspects of the Permit conditions, which are relevant to their duties and shall be provided with appropriate training and written operating instructions to enable them to carry out their duties.

### 2.2 Raw materials (including water)

2.2.1 The Operator shall, subject to the conditions of this Permit, use raw materials (including water) as described in the documentation specified in Table 2.2.1, or as otherwise agreed in writing by the Agency.

| <b>Table 2.2.1 : Raw materials (including water)</b> |  |                      |
|--|--|----------------------|
| <b>Description</b>                                   | <b>Parts</b>   | <b>Date Received</b> |
| Application  | The response to question 2.2 given in section 5 and figures 6.4 and 6.7 of the application | 10/12/01             |
| Response to Schedule 4 Part 1 Notice issued 5/03/02  | Response to question 4, excluding references to sulphuric acid in box 1.                   | 03/05/02             |
| Further information                                  | Response to further questions raised 14/6/02, question 1                                   | 17/06/02             |
| Further Information                                  | Headed 'Fuel Oil Storage'  | 27/08/02             |

2.2.2 The materials detailed in Table 2.2.2 shall be stored in the location, manner and storage conditions specified in that table.

| <b>Table 2.2.2: Raw Materials (including water)</b> |                                    |  |   |
|---|------------------------------------|--|---|
| <b>Material</b>                                     | <b>Location of Storage on site</b> | <b>Manner of Storage</b>                 | <b>Storage Conditions</b>                       |
| Municipal Waste                                     | As detailed in the Application     | Enclosed waste bunker                    | Dedicated contained concrete bunker             |
| Lime  | As detailed in the Application     | Silo with self cleaning filter on vent.  | Designated storage area with contained drainage |
| Urea  | As detailed in the Application     | Sealed bags                              | Designated storage area with contained drainage |
| Activated Carbon                                    | As detailed in the Application     | Silo with self cleaning filter on vent.  | Designated storage area with contained drainage |
| Fuel oil for on site vehicles                       | As detailed in the Application     | Bulk tanks                               | Bunded area, including transfer connections.    |
| Lubricating oils and other maintenance fluids       | As detailed in the application     | Sealed drums and other sealed containers | Within bunded, covered storage area             |
| Water treatment chemicals                           | As detailed in the application     | Sealed drums and other sealed containers | Within bunded, covered storage area             |

## 2.3 **Operating Techniques**

2.3.1 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 2.3.1, or as otherwise agreed in writing by the Agency.

| <b>Table 2.3.1: Operating techniques</b>            |   |                      |
|---|---|----------------------|
| <b>Description</b>                                  | <b>Parts</b>  | <b>Date Received</b> |
| Application   | The response to questions 2.3 given in section 6 and annex C of the application                   | 10/12/01             |
| Response to Schedule 4 Part 1 Notice issued 5/03/02 | Response to questions 5, 14, 15 and 21 and in appendices A and B of the response.                 | 03/05/02             |
| Further information                                 | Whole document  | 14/06/02             |
| Further information                                 | Response to further questions raised 14/06/02, questions 2 to 5                                   | 17/06/02             |
| Further information                                 | Response to further questions raised 5/06/02, questions 2 and 3                                   | 17/06/02             |
| Further Information                                 | Headed 'Waste Categories'   | 27/08/02             |
| Application for variation PP3332SL                  | The response to questions in sections C2.1, C2.2, C2.7 and C2.10 of the Application for variation | 16/03/05             |

2.3.2 Only the wastes specified in Schedule 5 shall be incinerated in the Permitted Installation subject to the limitations and in quantities not exceeding those specified for the waste types specified in Table 2.3.2

| <b>Table 2.3.2: Permitted Waste Types</b>                                 |  |                           |
|---|--|---------------------------|
| <b>Waste type</b>   | <b>Limitations</b>   | <b>Maximum throughput</b> |
| Mixed municipal waste   | Excluding separately collected fractions unless recycling / recovery options cannot be practicably exploited   | 225 000 tonnes/yr         |
| Other municipal waste   | Only where it can be demonstrated that recycling / recovery options cannot be practicably exploited <sup>(1)</sup>   |                           |
| Municipal waste - separately collected fractions and biodegradable waste. | Only where it can be demonstrated that recycling / recovery options cannot be practicably exploited. <sup>(1)</sup>  |                           |
| Non-hazardous commercial and industrial wastes                            | Only in combination with mixed municipal waste as specified in note (d) of Section F (DE09-068 waste mix) of the Application for variation. <sup>(1)</sup> |                           |
| Separately collected fractions of packaging and related wastes            | Only where it can be demonstrated that recycling / recovery options cannot be practicably exploited. <sup>(1)</sup>  |                           |

Note 1: Total incineration of *all* Note 1 wastes shall be less than 20 % of total waste input.

2.3.3 The Operator shall adopt procedures and practices to, as far as practicable, identify and manage the wastes delivered to the Permitted Installation such that the conditions of this Permit are not breached.

2.3.4 The Operator shall adopt effective procedures and practices to monitor and control pests, odour and litter.

2.3.5 The Operator shall carry out and record the results of a daily olfactory assessment along the boundary of the Permitted Installation.

2.3.6 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 2.3.6.

**Table 2.3.6: Equivalent parameters and technical measures**

| Parameter or measure        | Requirement or description of measure, and frequency if relevant   |
|-----------------------------|--|
| Bottom ash burn-out quality | The Permitted Installation must be operated to ensure that the bottom ash shall have a loss on ignition of less than 5% of the dry weight of the ash |

2.3.7 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; or
- the oxygen level is below, or falls below, 6% (wet) by volume; or
- any continuous emission limit value in Table 6.1.2(a) is exceeded; or
- any continuous emission limit value in Table 6.1.2 is exceeded, other than under abnormal operating conditions ; or
- monitoring results required to demonstrate compliance with any continuous emission limit value in Table 6.1.2 are unavailable other than under abnormal operating conditions.

2.3.8 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 2.3.7, as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.3.7 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.

2.3.9 The Operator shall record the beginning and end of each period of abnormal operation.

2.3.10 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.

2.3.11 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 6.1.2, or continuous emission monitors 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 6.1.2 (a);
- the alternative techniques to demonstrate compliance with the abnormal operation emission limit value(s) in Table 6.1.2 (a), as detailed in the Application or as agreed in writing with the Agency, are unavailable.

2.3.12 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 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.

2.3.13 The bag filter bypass use shall be minimised and only used when feedstock waste is not present in the furnace, or in the event of an emergency. Any use of the bypass when waste is present in the furnace shall be notified to the Agency in accordance with condition 5.1.1.6. The CEM equipment shall be located such that releases from Release Point A1 shall be monitored (within the instrument range) during periods when the bag filter bypass operates.

2.3.14 The Operator shall reduce or close operations as soon as practical on becoming aware of a substantiated grounding of a visible plume from release point A1.

2.3.15 The Operator shall operate the Permitted Installation in accordance with:

- a. the documentation provided in response to condition 1.1.3 (e) in the original permit from the date of submission of such documentation to the Agency until the completion of Commissioning; and
- b. the documentation provided in response to condition 1.1.3 (f) in the original permit unless and until otherwise agreed in writing with the Agency or specified by the Agency.

## 2.4 **Groundwater protection**

2.4.1 The Permitted Installation shall, subject to the conditions of this Permit, be controlled as described in the documentation specified in Table 2.4.1, or as otherwise agreed in writing by the Agency.

**Table 2.4.1: Groundwater protection**

| Description | Parts   | Date Received |
|-------------|---|---------------|
| Application | The response to questions 2.4 given in section 7 of the application | 10/12/01      |

## 2.5 **Waste handling and storage**

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.

2.5.3 The Operator shall, subject to the conditions of this Permit, handle and store waste as described in the documentation specified in Table 2.5.1, or as otherwise agreed in writing by the Agency.

**Table 2.5.1: Waste handling and storage**

| Description  | Parts   | Date Received |
|--|---|---------------|
| Application  | The response to question 2.5. given in section 8 of the application | 10/12/01      |
| Response to Schedule 4 Part 1 Notice issued 05/03/02 | Response to question 7  | 03/05/02      |

2.5.4 Waste materials specified in Table 2.5.2 shall only be stored on the site in the location, manner and storage conditions specified in that Table.

**Table 2.5.2: Waste stored on site**

| Description of Waste           | Location of Storage on Site    | Manner of Storage                                     | Storage Conditions   |
|--------------------------------|--------------------------------|---|--|
| Reject loads and oversize      | As detailed in the Application | Segregated area. Loose and liquid loads in containers | Impermeable hard standing within tipping hall.                               |
| Waste oil, grease and solvents | As detailed in the Application | Drums   | Drums to be clearly marked, held on contained concrete hard standing         |
| Bottom ash                     | As detailed in the Application | Dedicated storage bay                                 | Covered concrete hard standing with contained drainage                       |
| APC Residues                   | As detailed in the Application | Silo  | Inside building in dedicated area with contained drainage                    |
| Metals for recycling           | As detailed in the Application | Dedicated storage bays                                | Covered concrete hardstanding with controlled drainage and three side walls. |

2.5.5 Bottom Ash and APC Residues shall not be mixed prior to recovery / disposal.

2.5.6 Effective dust control measures shall be installed and used for the raw ash storage and processing and removal of products and unused and rejected wastes.

## 2.6 Waste recovery and 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 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.

- 2.6.3 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.
- 2.6.4 The Operator shall, subject to the conditions of this Permit, recover and dispose of waste as described in the documentation specified in Table 2.6.1, or as otherwise agreed in writing by the Agency.

**Table 2.6.1: Waste recovery and disposal**

| Description  | Parts  | Date Received |
|--|--|---------------|
| Application  | The response to question 2.6 given in section 9 of the application | 10/12/01      |
| Response to Schedule 4 Part 1 Notice issued 05/03/02 | Response to questions 8  | 03/05/02      |

- 2.6.5 Waste produced at the Permitted Installation shall, as a minimum, be sampled and analysed in accordance with Table 2.6.2. Additional samples shall be taken and tested and appropriate action taken whenever:
- disposal or recovery routes change; and / or
  - it is suspected that the nature or composition of the waste has changed such that the route selected may no longer be appropriate.

**Table 2.6.2 : Emission limits and monitoring frequency for solid residues**

| Emission reference | point | Substance | Limit (including Reference Period) | Monitoring frequency | Monitoring method             |
|--------------------|-------|-----------|------------------------------------|----------------------|-------------------------------|
| Bottom Ash         |       | LOI       | 5%                                 | Monthly              | Agency ash sampling protocol. |

## 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 4.1.3.
- 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.

2.7.4 The Operator shall, subject to the conditions of this Permit, use energy as described in the documentation specified in Table 2.7.1, or as otherwise agreed in writing by the Agency.

| <b>Table 2.7 1: Energy efficiency</b>                |   |                      |
|--|---|----------------------|
| <b>Description</b>                                   | <b>Parts</b>  | <b>Date Received</b> |
| Application  | The response to question 2.7 given in section 10 of the application | 10/12/01             |
| Response to Schedule 4 Part 1 Notice issued 05/03/02 | Response to questions 9 and 23                                      | 03/05/02             |
| Further Information                                  | Response to further questions raised 5/06/02, question 5.           | 17/06/02             |

## 2.8 **Accident prevention and control**

2.8.1 The Operator shall, subject to the conditions of this Permit, prevent and limit the consequences of accidents as described in the documentation specified in Table 2.8.1, or as otherwise agreed in writing by the Agency.

| <b>Table 2.8.1 : Accident prevention and control</b> |   |                      |
|--|---|----------------------|
| <b>Description</b>                                   | <b>Parts</b>  | <b>Date Received</b> |
| Application  | The response to question 2.8 given in section 11 of the application | 10/12/01             |
| Response to Schedule 4 Part 1 Notice issued 05/03/02 | Response to questions 10  | 03/05/02             |

## 2.9 **Noise and vibration**

2.9.1 The Operator shall, subject to the conditions of this Permit, control noise and vibration as described in the documentation specified in Table 2.9.1, or as otherwise agreed in writing by the Agency.

**Table 2.9.1 : Noise and vibration**

| Description  | Parts   | Date Received |
|--|---|---------------|
| Application  | The response to question 2.9 given in section 12 of the application | 10/12/01      |
| Response to Schedule 4 Part 1 Notice issued 05/03/02 | Response to questions 11 and 24                                     | 03/05/02      |
| Further Information                                  | Response to further questions raised 14/06/02, question 6           | 17/06/02      |

2.9.2 The Operator shall maintain a written Noise and Vibration Management Plan with the objective of reducing to a minimum noise and vibration emissions, so as to avoid harm or nuisance within the local community. The plan shall include an inspection and corrective maintenance regime for the noise abatement measures adopted within the Permitted Installation. The plan shall also include a procedure for recording, investigating and resolving noise complaints.

## 2.10 **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 6.1.2 and 6.1.2a, 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 6.1.2 and 6.1.2a, 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 6.1.2 and 6.1.2a, 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**

| Emission point reference or source or description of point of measurement | Substance or parameter            | Monitoring frequency | Monitoring method               | Other specifications |
|---|-----------------------------------|----------------------|---------------------------------|----------------------|
| Emission Point A1   | temperature                       | continuous           | As described in the Application |                      |
| Emission Point A1   | pressure                          | continuous           | As described in the Application |                      |
| Emission Point A1   | oxygen content                    | continuous           | As described in the Application |                      |
| Emission Point A1   | water vapour content              | continuous           | As described in the Application |                      |
| Emission Point A1   | Ammonia (NH <sub>3</sub> ) - Half | continuous           | As described in the             |                      |

**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> |
|--|---|--|---|-----------------------------|
|  | hour average and daily average  |  | Application   |                             |
| Emission Point A1  | Nitrous oxide (N <sub>2</sub> O) - Periodic over minimum 1- hour period                       | Bi-annual <sup>1</sup>   | VDI 2469-1 or VDI 2469-2  |                             |
| Emission Point A1  | Dioxin-like PCBs (WHO-TEQ <sup>2</sup> Humans / Mammals)                                      | Bi-annual periodic measurement <sup>1</sup> , 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) |                             |
| Emission Point A1  | Dioxin-like PCBs (WHO-TEQ <sup>2</sup> Fish)  | Bi-annual periodic measurement <sup>1</sup> , 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) |                             |
| Emission Point A1  | Dioxin-like PCBs (WHO-TEQ <sup>2</sup> Birds)   | Bi-annual periodic measurement <sup>1</sup> , 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) |                             |
| Emission Point A1  | Specific individual poly-cyclic aromatic hydrocarbons (PAHs), as specified in condition 6.1.1 | Bi-annual periodic measurement <sup>1</sup> , average value over sample period of between 6 and 8 hours. | Procedure shall use BS ISO 11338-1 and BS-ISO 11338-2.  |                             |
| Emission Point A1  | Dioxins / furans (WHO-TEQ Humans / Mammals) <sup>2</sup>                                      | Bi-annual periodic measurement <sup>1</sup> , 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) |                             |
| Emission Point A1  | Dioxins / furans (WHO-TEQ Fish) <sup>2</sup>  | Bi-annual periodic measurement <sup>1</sup> , 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) |                             |
| Emission Point A1  | Dioxins / furans (WHO-TEQ Birds) <sup>2</sup>   | Bi-annual periodic measurement <sup>1</sup> , 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) |                             |
| Emission Point S1  | Flow l/s  | continuous   | BS 3680   |                             |

**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   | Metals (Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs. | Quarterly <sup>3</sup>                          | Sampling and analysis as per Agency ash sampling protocol. |                             |
| Bottom Ash   | Total soluble fraction and metals (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. |                             |
| APC Residues   | Metals (Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs. | Quarterly <sup>3</sup>                          | Sampling and analysis as per Agency ash sampling protocol. |                             |
| APC Residues   | Total soluble fraction and metals (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**

| Emission point reference or source or description of point of measurement | Substance or parameter | Monitoring frequency | Monitoring method               | Other specifications |
|---|------------------------|----------------------|---------------------------------|----------------------|
| Close to the Combustion Chamber inner wall                                | Temperature (° C)      | Continuous           | Traceable to National Standards |                      |

Note 1: Quarterly in first year of operation

Note 2: The TEQ sum of the equivalence factors to be reported as a range based on: All congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum.

Note 3: Monthly in the first year of operation.

- 2.10.5 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 and have an MCERTS certified range which is not greater than 1.5 times the daily emission limit value (ELV) specified in Table 6.1.2. 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.
- 2.10.6 Where requested in writing by the Agency, the Operator shall provide at least 14 days advance notice of undertaking monitoring/spot sampling.
- 2.10.7 The Operator shall provide:
- a** safe and permanent means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 2, unless otherwise specified in that Schedule; and

**b** safe means of access to other sampling/monitoring points when required by the Agency.

2.10.8 On a weekly basis, the Operator shall make available on the Internet a summary report of the continuous monitoring data.

2.10.9 The Operator shall ensure that sampling ports are compliant with the requirements of BS EN 13284-1.

2.10.10 Measurements for the determination of concentrations of substances specified in this Permit shall be carried out representatively.

## 2.11 **Decommissioning**

2.11.1 The Operator shall, subject to the conditions of this Permit, make provision for decommissioning the Permitted Installation as described in the documentation specified in Table 2.11.1, or as otherwise agreed in writing by the Agency.

| <b>Table 2.11.1 : Decommissioning</b>                |  |                      |
|--|--|----------------------|
| <b>Description</b>                                   | <b>Parts</b>   | <b>Date Received</b> |
| Application  | The response to question 2.11 given in section 14 of the application and specifically excludes section 3 of the application. | 10/12/01             |
| Response to Schedule 4 Part 1 Notice issued 05/03/02 | Response to questions 13   | 03/05/02             |

2.11.2 A site closure plan shall be maintained such that, upon definitive cessation of activities, the Permitted Installation can be decommissioned safely and that pollution risks from the site are minimised.

## 2.12 **Multi-operator installations**

2.12.1 This is not a multi-operator installation

## Records

- 3.1.1 A record (a "Specified Record") shall be made of:-
- a** any malfunction, breakdown or failure of plant, equipment or techniques (including down time and any short term and long term remedial measures) that may have, has had or might have had an effect on the environmental performance of the Permitted Installation. These records shall be kept in a log maintained for that purpose;
  - b** all monitoring and sampling taken or carried out and any assessment or evaluation made on the basis of such data;
  - c** CEM data before and after subtraction of the uncertainty errors;
  - d** raw data for all specified congeners of dioxins/furans and PCBs;
  - e** any other Specified Records for the Permitted Installation / sector as stipulated from time to time by the Agency.
- 3.1.2 There shall be made available for inspection by the Agency at any reasonable time:
- a** Specified Records;
  - b** any other records made by the Operator in relation to the operation of the Permitted Installation ("Other Records").
- 3.1.3 A copy of any Specified or Other Records shall be supplied to the Agency on demand and without charge.
- 3.1.4 Specified Records and Other Records shall:-
- a** be legible;
  - b** be made as soon as reasonably practicable; and
  - c** indicate any amendments, which have been made and shall include the original record wherever possible.
- 3.1.5 Specified Records and Other Records shall be retained for a minimum period of 4 years from the date when the records were made at the Permitted Installation.
- 3.1.6 For all waste received at or produced from the Permitted Installation, the Operator shall record (and shall retain such records for a minimum of 4 years)
- a** its composition, or as appropriate, description;
  - b** the best estimate of the quantity received or produced;
  - c** its disposal routes; and
  - d** the best estimate of the quantity sent for recovery.
- 3.1.7 A record shall be made at the Permitted Installation of any complaints concerning the Permitted Installation's effect or alleged effect on the environment. The record shall give the date of complaint, time of complaint, a summary of any investigation and the results of such investigation. Such records shall be made in a log kept for this purpose.

## 4 Reporting

- 4.1.1 All reports and notifications required by this Permit, or by Regulation 16 of the PPC Regulations, shall be sent to the Agency at the address 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, 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..
- 4.1.6 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 Fugitive emissions shall be reviewed on an annual basis and a summary report on this review shall, not later than 31 January each year, be sent to the Agency detailing such releases and the measures taken to prevent or reduce them.
- 4.1.8 By 31 January each year, the Operator shall submit to the Agency an annual report in writing on quantities of ash, their destinations and their components / compositions, which have been disposed of or recycled in the previous calendar year. The report shall review (with regard to BAT) opportunities for increasing waste recovery over the coming year, and report on the progress with those identified in the previous year's report.

4.1.9 The Operator shall forward without delay to the Agency, any complaints received relating to off-site noise nuisance.

## 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 10.1.1.
  - 5.1.1.6 each operation of the bag filter bypass when waste is feeding. The report shall include the reasons for operation of the bypass, and the measures taken to prevent recurrence.
- 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 for 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 that Schedule as soon as practicable thereafter;
  - 5.1.2.3 for notifications under condition 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.
- 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:-
- 1 any change in the Operator's trading name, registered name or registered office address;
  - 2 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)

- 3 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:
- 4 any change in the Operator's name or address;
  - 5 any steps taken with a view to the dissolution of the Operator.
- 5.1.5.3 In any other case: -
- 6 the death of any of the named Operators (where the Operator consists of more than one named individual);
  - 7 any change in the Operator's name(s) or address(es);
  - 8 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 Emissions

### 6.1 Emissions into air

6.1.1 Emissions to air from the emission point(s) specified in Table 6.1.1 shall only arise from the source(s) specified in that Table.

**Table 6.1.1: Emission points into air**

| Emission point reference/description | Source                            | Location of emission point   |
|--------------------------------------|-----------------------------------|--|
| A1                                   | Incinerator 76m main plant stack  | Labelled 'Stack' on site plan received 17 June 2002 as further information.                  |
| A2                                   | Lime silo filter vent             | Labelled 'Lime Storage Silo's' on site plan received 17 June 2002 as further information     |
| A3                                   | Activated carbon silo filter vent | Labelled 'Activated Carbon Silo's' on site plan received 17 June 2002 as further information |
| A4                                   | Fuel oil storage tank vent        | To west of main plant building.  |

6.1.2 The limits for emissions to air for the parameters and emission points set out in Table 6.1.2 shall not be exceeded except during a period of abnormal operation. During a period of abnormal operation, the limits for emissions to air for the parameters and emission points set out in Table 6.1.2 (a) shall not be exceeded.

**Table 6.1.2 : Emission limits to air and monitoring during normal operation**

| Emission reference | point | Parameter                  | Limit (including Reference Period) <sup>1</sup>             | Monitoring frequency   | Monitoring method            |
|--------------------|-------|----------------------------|---|------------------------|------------------------------|
| A1                 |       | Particulate matter         | 30 mg/m <sup>3</sup><br>½-hr average                        | Continuous measurement | BS EN 13284-2 <sup>6 8</sup> |
| A1                 |       | Particulate matter         | 10 mg/m <sup>3</sup><br>daily average                       | Continuous measurement | BS EN 13284-2 <sup>6 8</sup> |
| A1                 |       | Particulate matter         | 20 mg/m <sup>3</sup><br>periodic over minimum 1-hour period | Bi-annual              | BS EN 13284-1                |
| A1                 |       | Total Organic Carbon (TOC) | 20 mg/m <sup>3</sup><br>½-hr average                        | Continuous measurement | BS EN 12619 <sup>6 8</sup>   |
| A1                 |       | Total Organic Carbon (TOC) | 10 mg/m <sup>3</sup><br>daily average                       | Continuous measurement | BS EN 12619 <sup>6 8</sup>   |
| A1                 |       | Total Organic Carbon (TOC) | 20 mg/m <sup>3</sup><br>periodic over minimum 1-hour period | Bi-annual              | BS EN 12619                  |

**Table 6.1.2 : Emission limits to air and monitoring during normal operation**

| Emission reference | point | Parameter   | Limit (including Reference Period) <sup>1</sup>  | Monitoring frequency    | Monitoring method                           |
|--------------------|-------|---|--|-------------------------|---|
| A1                 |       | Hydrogen chloride   | 60 mg/m <sup>3</sup><br>½-hr average   | Continuous measurement  | MCERTS certified instruments <sup>7 9</sup> |
| A1                 |       | Hydrogen chloride   | 10 mg/m <sup>3</sup><br>daily average  | Continuous measurement  | MCERTS certified instruments <sup>7 9</sup> |
| A1                 |       | Hydrogen chloride   | 30 mg/m <sup>3</sup><br>periodic over minimum 1-hour period  | Bi-annual <sup>10</sup> | BS EN 1911                                  |
| A1                 |       | Hydrogen fluoride   | 2 mg/m <sup>3</sup><br>periodic over minimum 1-hour period   | Quarterly               | USEPA Method 26/26A                         |
| A1                 |       | Carbon monoxide   | 100 mg/m <sup>3</sup><br>½-hr average  | Continuous measurement  | ISO 12039 <sup>4 8</sup>                    |
| A1                 |       | Carbon monoxide   | 50 mg/m <sup>3</sup><br>daily average  | Continuous measurement  | ISO 12039 <sup>4 8</sup>                    |
| A1                 |       | Carbon monoxide   | 100 mg/m <sup>3</sup><br>periodic over minimum 4 hour period, data to be reported as ½-hour averages | Bi-annual <sup>10</sup> | ISO 12039                                   |
| A1                 |       | Sulphur dioxide   | 200 mg/m <sup>3</sup><br>½-hr average  | Continuous measurement  | BS 6069-4.4 <sup>5 8</sup>                  |
| A1                 |       | Sulphur dioxide   | 50 mg/m <sup>3</sup><br>daily average  | Continuous measurement  | BS 6069-4.4 <sup>5 8</sup>                  |
| A1                 |       | Sulphur dioxide   | 200 mg/m <sup>3</sup><br>periodic over minimum 4 hour period, data to be reported as ½ hour averages | Bi-annual <sup>10</sup> | BS 6069-4.1                                 |
| A1                 |       | Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> ) | 400 mg/m <sup>3</sup><br>½-hr average  | Continuous measurement  | ISO 10849 <sup>5 8</sup>                    |
| A1                 |       | Oxides of nitrogen (NO)   | 180mg/m <sup>3</sup><br>daily average  | Continuous measurement  | ISO 10849 <sup>5 8</sup>                    |

**Table 6.1.2 : Emission limits to air and monitoring during normal operation**

| Emission reference | point | Parameter   | Limit (including Reference Period) <sup>1</sup>  | Monitoring frequency       | Monitoring method         |
|--------------------|-------|---|--|----------------------------|---------------------------|
|                    |       | and NO <sub>2</sub> expressed as NO <sub>2</sub> )                            |  |                            |                           |
| A1                 |       | Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )     | 400 mg/m <sup>3</sup> periodic over minimum 4 hour period, data to be reported as ½- hour averages | Bi-annual <sup>10</sup>    | ISO 10849 or BS ISO 11564 |
| A1                 |       | Cadmium & thallium and their compounds (total) <sup>2</sup>                   | 0.05 mg/m <sup>3</sup> periodic over minimum 30 minute, maximum 8 hour period                      | Quarterly.                 | BS EN 14385               |
| A1                 |       | Mercury and its compounds <sup>2</sup>  | 0.05 mg/m <sup>3</sup> periodic over minimum 30 minute, maximum 8 hour period                      | Quarterly.                 | BS EN 13211               |
| A1                 |       | Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total) <sup>2</sup> | 0.5 mg/m <sup>3</sup> periodic over minimum 30 minute, maximum 8 hour period                       | Quarterly                  | BS EN 14385               |
| A1                 |       | 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 <sup>10 11</sup> | BS EN 1948                |

Note 1: See Section 10 for reference conditions

Note 2: Metals include gaseous, vapour and solid phases as well as their compounds (expressed as the metal or the sum of the metals as specified). Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V mean antimony, arsenic, lead, chromium, cobalt, copper, manganese, nickel and vanadium respectively.

Note 3: The I-TEQ sum of the equivalence factors to be reported as a range based on: All congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum.

Note 4: The Continuous Emission Monitors used shall be such that the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed 10%. Valid half-hourly average values shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted this value of the confidence interval (10%). Where it is necessary to calibrate or maintain the monitor and this means that data is not available for a complete half-hour period, the half-hourly average shall nonetheless be considered valid if measurements are available for a minimum of 20 minutes during the half-hour period. (The number of half-hourly averages so validated shall not exceed 5 per day). Daily average values shall be determined as the average of all the valid half-hourly average values within a calendar day. The daily average value will be considered valid if no more than five half-hourly average values in any day have been determined not to be valid. No more than ten daily average values per year shall be determined not to be valid.

Note 5: As Note 4, except that the value of the confidence interval is 20% in place of 10%.

Note 6: As Note 4, except that the value of the confidence interval is 30% in place of 10%.

Note 7: As Note 4, except that the value of the confidence interval is 40% in place of 10%.

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

Note 9: The certification range for MCERTS equipment should be 1.5 times the daily emission limit value. The CEM shall also be able to measure instantaneous values over the ranges that are to be expected during all operating conditions. If it is necessary to use more than one range setting of the CEM to achieve this requirement, the CEM shall be verified for monitoring supplementary, higher ranges.

Note 10: Quarterly periodic measurement in first 12 months of operation.

Note 11: At least one monitoring result should be reported by 31<sup>st</sup> March 2006.

| <b>Table 6.1.2 (a) : Emission limits to air and monitoring during abnormal operating conditions</b> |              |                            |   |                             |  |
|---|--------------|----------------------------|---|-----------------------------|--|
| <b>Emission reference</b>   | <b>point</b> | <b>Parameter</b>           | <b>Limit (including Reference Period)<sup>1</sup></b> | <b>Monitoring frequency</b> | <b>Monitoring method</b>   |
| A1  |              | Particulate matter         | 150 mg/m <sup>3</sup><br>½-hr average                 | Continuous measurement      | BS EN 13824-2 <sup>4,2</sup> during abatement plant failure or alternative surrogate as specified in the Application during failure of the continuous emission monitor |
| A1  |              | Total Organic Carbon (TOC) | 20 mg/m <sup>3</sup><br>½-hr average                  | Continuous measurement      | BS EN 12619 <sup>4,2</sup> during abatement plant failure  |
| A1  |              | Carbon monoxide            | 100 mg/m <sup>3</sup><br>½-hr average                 | Continuous measurement      | [SO 12039 <sup>4,3</sup> during abatement plant failure  |

Note 1: See Section 10 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 if no waste is being incinerated) 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 that data is not available for a complete half-hour period, the half-hourly average shall nonetheless be considered valid if measurements are available for a minimum of 20 minutes during the half-hour period. (The number of half-hourly averages so validated shall not exceed 5 per day).

Note 3: As Note 2, except that the value of the confidence interval is 10% in place of 30%.

Note 4: MCERTS certification to the appropriate ranges and determinands is a demonstration of compliance to the applicable standards.

6.1.3 For periodic measurement, compliance shall be determined from the measured value after having subtracted the uncertainty error for the selected method of sampling and analysis for each relevant pollutant.

## 6.2 Emissions to land

6.2.1 There shall be no emission to land from the Permitted Installation

6.2.2 The Operator shall notify the Agency, as soon as practicable, of any information concerning the state of the Site which affects or updates that provided to the Agency as part of the Site Report submitted with the application for this Permit.

## 6.3 Emissions to water [other than emissions to sewer]

6.3.1 There shall be no emission to water from the Permitted Installation

## 6.4 Emissions to sewer

6.4.1 Emissions into sewer from the emission point(s) specified in Table 6.4.1 shall only arise from the source(s) specified in that Table.

**Table 6.4.1 Emission points into sewer**

| Emission point reference | Source   | Sewer                    |
|--------------------------|--|--------------------------|
| S1                       | Process effluent   | Yorkshire Water Services |
| S2                       | Surplus rainwater from buildings, hardstanding areas and roadways to surface water drain via interceptor | Yorkshire Water Services |

6.4.2 The limits for the emissions into sewer for the parameter(s) and emission point(s) set out in Table 6.4.2 shall not be exceeded.

6.4.3 The Operator shall carry out monitoring of the parameters listed in Table 6.4.2, from the emission point(s) and at least at the frequencies specified in that table.

| <b>Table 6.4.2 Emission limits into sewer</b>  |                          |   |
|--|--------------------------|---|
| <b>Parameter</b>   | <b>Emission point S1</b> | <b>Frequency and duration</b>             |
| Total suspended solids mg/l  | 150                      | Weekly flow proportional composite sample |
| pH maximum / minimum   | 10 / 6                   | Weekly flow proportional composite sample |
| Chemical Oxygen Demand mg/l  | 1000                     | Weekly flow proportional composite sample |
| Oil and grease mg/l  | 5                        | Weekly flow proportional composite sample |
| Mercury and its compounds expressed as mercury (Hg), µg/l  | 3.0                      | Weekly flow proportional composite sample |
| Cadmium and its compounds expressed as cadmium (Cd) mg/l   | 0.05                     | Weekly flow proportional composite sample |
| Total other metals and their compounds (Fe, Zn, Cu, Ni, Mn, Cr, Pb, Sn and As – taken together) mg/l | 5                        | Weekly flow proportional composite sample |

6.4.4 There shall be no emission into sewer from the Permitted Installation of any substance prescribed for water for which no limit is specified in Table 6.4.2 except in a concentration, which is no greater than the background concentration.

## **6.5 Emissions of heat**

6.5.1 There are no conditions in relation to heat.

## **6.6 Emissions of noise and vibration**

6.6.1 There are no on-site noise or vibration conditions other than those covered by condition 2.9.

## 7 Transfer to effluent treatment plant

- 7.1.1 No transfers to the effluent treatment plant are controlled under this part of this Permit.  
Emissions to water (sewer) are controlled under condition 6.4.

## 8 Off site conditions

- 8.1.1 The Operator shall undertake a soil monitoring programme for the parameters specified in sections D3.8.2 and D3.8.3 of the Application, by the methodologies specified in the further information to the application supplied 10/05/02 and at locations S1 and S2 specified in the Application, in figure D3.9 as 1 and 2 respectively. The soil monitoring programme shall commence prior to the operation of the Permitted Installation to establish pre-operational values as required by condition 1.1.3 (a) in the original permit. Subsequent monitoring shall be carried out on an annual basis. An assessment of monitoring results compared against pre-operational values shall be reported annually to the Agency, not later than 31 January.

## 9 Improvement programme

- 9.1.1 The Operator shall complete the requirements specified in Table 9.1.1 by the date specified in that Table, and shall send written notification of the date of completion of each requirement to the Agency, at the Reporting Address, within 14 days of the completion of each such requirement.

**Table 9.1.1: Improvement programme requirements**

| Reference | Requirement  | Date  |
|-----------|--|---|
| 9.2       | The Operator shall submit a written post commissioning report. The report shall include comparisons of process design performance against actual measured performance. This shall include but not limited to:<br>Raw material consumption including water<br>Waste combustion conditions and burn out performance<br>Waste production and analysis<br>Energy efficiency<br>Noise and vibration<br>Emissions into air and water.  | 31 <sup>st</sup> July 2006  |
| 9.3       | The Operator shall take measurements to demonstrate the residence time, minimum temperature and oxygen content within the incinerator whilst operating under the anticipated most unfavourable operating conditions. To include:<br>Multiple traverse measurements of gas temperature within the qualifying secondary combustion zone.<br>Time of flight measurements using a tracer gas to confirm the minimum residence time within the qualifying combustion zone.<br>The results shall be submitted to the Agency in writing.  | Within 3 months of completion of commissioning  |
| 9.4       | The Operator shall submit, in writing, to the Agency, a report detailing Installation noise monitoring carried out in accordance with BS 4142, during commissioning. Measurements will be taken on one weekday, one Saturday and one Sunday, during the daytime (i.e. in the period 9.00am to 5.00pm) and the quietest night-time period (i.e. in the period 1.00am to 4.00am). Representative measurement periods will be used and the following parameters will be reported: ambient noise; residual noise; LA90 background; specific noise; specific noise rating level and likelihood of complaint assessment result. The measurement positions should be at the site boundary and should be agreed in writing by the Agency prior to monitoring taking place. | Within 3 months of completion of commissioning.   |
| 9.9       | The Operator shall submit a proposal to the Agency to carry out tests to determine the size distribution of the particulate matter in the exhaust gas emissions to air from emission point A1 identifying the fractions within the PM <sub>10</sub> , PM <sub>2.5</sub> and PM <sub>1.0</sub> ranges. The proposal shall include a timetable to carry out such tests and produce a report on the results. On receipt of written agreement by the Agency to the proposal and the timetable, the Operator shall carry out the tests and submit to the Agency a report on the results.  | Proposal to be submitted to the Agency by 31 <sup>st</sup> August 2006<br>Report on size distribution tests to be submitted to the Agency within 2 months of the end of the agreed timetable. |
| 9.10      | The Operator shall calibrate and verify the performance of Continuous Emission Monitors for release points and parameters as specified in  | Report to be submitted to the   |

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Table 6.1.2 to BS EN 14181 and submit a summary report to the Environment Agency as evidence of compliance with the requirements of BS EN 14181. Agency by 28/12/2006.

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## 10 Interpretation

10.1.1 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 purification devices 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 prescribed emission limit values.

*“Authorised Officer”*

means any person authorised by the Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, powers specified in Section 108(4) of that Act;

*“Annual release”*

means the total release during any calendar year commencing 1 January;

*“APC Residues”*

means air pollution control residues;

*“Application”*

means the Application by the Operator for a PPC Permit received 10 December 2001; the Operator’s response to any notices served under Schedule 4 of the PPC Regulations; the variation application received 16 March 2005; and any additional information otherwise supplied by the Operator in writing;

*“Background concentration”*

means the same as “background quantity” as defined in paragraph 11 to Part 2 to Schedule 1 of the PPC Regulations;

*“BAT”*

means Best Available Techniques;

*“Bi-annual”*

means twice per year with at least five months between tests;

*“Bottom Ash”*

means any ash falling through the incinerator grate or transported by the grate;

*“CEM”*

means 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;

*“COT”*

means Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment;

*“Daily average”*

for releases of substances to air means the average of half-hourly averages over a calendar day during normal operation. Where any of abnormal operation, start-up or shut-down occur during the day in such a way that there are less than 43 half-hourly averages recorded during normal operation, no daily average shall be recorded for that day.

*“Dioxins and Furans”*

means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans;

*“ELV”*

means emission limit value;

*“Fugitive emission”*

means an emission from any point other than those specified in the Tables in part 6 of this Permit.

*“Grounding”*

means that a visible plume from Release Point A1 impinges on the ground or on any building thereon;

*“Hg, Cd, Sb, As, Pb, Cr, Co, Cu, Mn, Ni, Tl and V”*

mean respectively Mercury, Cadmium, Antimony, Arsenic, Lead, Chromium, Cobalt, Copper, Manganese, Nickel, Thallium and Vanadium;

*“Incineration Line”*

means all of the incineration equipment related to a common discharge to air location.

*“ISO”*

means International Standards Organisation;

*“I-TEF”*

means international toxic equivalency factors;

*“I-TEQ”*

means international toxic equivalent concentration;

*“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;

*“mg/m<sup>3</sup>”*

means milligrams per cubic metre;

*“ng/m<sup>3</sup>”*

means nanograms per cubic metre;

*“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 10.1.5;

*“Permitted Installation”*

means the activities and the limits to those activities described in Table 1.1.1 of this Permit.

*“PM<sub>10</sub>, PM<sub>2.5</sub>, PM<sub>1.0</sub>,”* mean respectively those particulates which have mean particle diameters of 10, 2.5 and 1.0 microns (µm)

*“PPC Regulations”*

means the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit;

*“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.

*“Release point”*

followed by the letter A, W, E or S means respectively a point shown on a map or plan forming a part of the Application for the release from the Permitted Installation into the air, into controlled waters, into an on-site effluent treatment plant or into a sewer;

*“Reporting Address”*

means the address, from time to time notified to the Operator, for that purpose by the Agency in writing;

*“Shutdown”*

is any period where the plant is being returned to a non-operational state and there is no waste being burned as described in the Application.

*“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 until waste has been fed to the incinerator in sufficient quantity to cover the grate and to initiate steady-state conditions as described in the Application.

*“Substances prescribed for water”*

means those substances mentioned in paragraph 13 of Part 2 of Schedule 1 to the PPC Regulations;

*“TEF”*

means toxic equivalence factors;

*“TEQ”*

means toxic equivalent concentration;

*“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).

*“UK”*

means United Kingdom;

*“UKAS”*

means United Kingdom Accreditation Service;

*“VOC”*

means any organic compound in the exhaust gas emissions;

*“Waste Incineration Directive”*

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

*“Waste oil”*

has the same meaning as in Directive 75/439/EEC

*“WHO”*

means the World health Organisation; and

*“Year”*

means calendar year ending 31 December.

- 10.1.2 Where a minimum limit is set for any emission / process parameter, references to exceeding the limit shall mean that the parameter shall not be less than that limit
- 10.1.3 Unless otherwise stated, any references in this Permit to concentrations of substances in emissions into air means:-
- 10.1.3.1 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

- 10.1.3.2 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
- 10.1.3.3 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,
- 10.1.4 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.

| TEF Schemes for Dioxins and Furans |             |                  |        |        |
|------------------------------------|-------------|------------------|--------|--------|
| Congener                           | I-TEF(1990) | WHO-TEF (1997/8) |        |        |
|                                    |             | Human / Mammals  | Fish   | Birds  |
| <b>Dioxins</b>                     |             |                  |        |        |
| 2,3,7,8-TCDD                       | 1           | 1                | 1      | 1      |
| 1,2,3,7,8-PeCDD                    | 0.5         | 1                | 1      | 1      |
| 1,2,3,4,7,8-HxCDD                  | 0.1         | 0.1              | 0.5    | 0.05   |
| 1,2,3,6,7,8-HxCDD                  | 0.1         | 0.1              | 0.01   | 0.01   |
| 1,2,3,7,8,9-HxCDD                  | 0.1         | 0.1              | 0.01   | 0.1    |
| 1,2,3,4,6,7,8-HpCDD                | 0.01        | 0.01             | 0.001  | <0.001 |
| OCDD                               | 0.001       | 0.0001           | -      | -      |
| <b>Furans</b>                      |             |                  |        |        |
| 2,3,7,8-TCDF                       | 0.1         | 0.1              | 0.05   | 1      |
| 1,2,3,7,8-PeCDF                    | 0.05        | 0.05             | 0.05   | 0.1    |
| 2,3,4,7,8-PeCDF                    | 0.5         | 0.5              | 0.5    | 1      |
| 1,2,3,4,7,8-Hx CDF                 | 0.1         | 0.1              | 0.1    | 0.1    |
| 1,2,3,7,8,9-HxCDF                  | 0.1         | 0.1              | 0.1    | 0.1    |
| 1,2,3,6,7,8-HxCDF                  | 0.1         | 0.1              | 0.1    | 0.1    |
| 2,3,4,6,7,8-HxCDF                  | 0.1         | 0.1              | 0.1    | 0.1    |
| 1,2,3,4,6,7,8-HpCDF                | 0.01        | 0.01             | 0.01   | 0.01   |
| 1,2,3,4,7,8,9-HpCDF                | 0.01        | 0.01             | 0.01   | 0.01   |
| OCDF                               | 0.001       | 0.0001           | 0.0001 | 0.0001 |

| TEF Schemes for Dioxin like PCBs |                  |           |         |
|----------------------------------|------------------|-----------|---------|
| Congener                         | WHO-TEF (1997/8) |           |         |
|                                  | Human / Mammals  | Fish      | Birds   |
| <b>Non-ortho PCBs</b>            |                  |           |         |
| 3,4,4',5-TCB(81)                 | 0.0001           | 0.0005    | 0.1     |
| 3,3',4,4'-TCB (77)               | 0.0001           | 0.0001    | 0.05    |
| 3,3',4,4',5-PeCB(126)            | 0.1              | 0.005     | 0.1     |
| 3,3',4,4',5,5'-HxCB(169)         | 0.01             | 0.00005   | 0.001   |
| <b>Mono-ortho</b>                |                  |           |         |
| 2,3,3',4,4'-PeCB(105)            | 0.0001           | <0.000005 | 0.0001  |
| 2,3,4,4',5-PeCB(114)             | 0.0005           | <0.000005 | 0.0001  |
| 2,3',4,4',5-PeCB(118)            | 0.0001           | <0.000005 | 0.00001 |
| 2',3,4,4',5-PeCB(123)            | 0.0001           | <0.000005 | 0.00001 |
| 2,3,3',4,4',5-HxCB(156)          | 0.0005           | <0.000005 | 0.0001  |
| 2,3,3',4,4',5'-HxCB(157)         | 0.0005           | <0.000005 | 0.0001  |
| 2,3',4,4',5,5'-HxCB(167)         | 0.00001          | <0.000005 | 0.00001 |
| 2,3,3',4,4',5,5'-HpCB(189)       | 0.0001           | <0.000005 | 0.00001 |

10.1.5 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.

## 11 Minor Operational Changes

- 11.1 The Operator shall seek the Agency's written agreement to any minor operational changes under condition 2.3.1 of this Permit by sending to the Agency: written notice of the details of the proposed change including an assessment of its possible effects (including waste production) on risks to the environment from the Permitted Installation; any relevant supporting assessments and drawings; and the proposed implementation date.
- 11.2 Any such change shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation in accordance with that change, and relevant provisions in the Application shall be deemed to be amended.
- 11.3 When the qualification "unless otherwise agreed in writing" is used elsewhere in this Permit, the Operator shall seek such agreement by sending to the Agency written notice of the details of the proposed method(s) or techniques.
- 11.4 Any such method(s) or techniques shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation using that method or technique, and relevant provisions in the Application shall be deemed to be amended

## 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

|                                      |  |
|--------------------------------------|--|
| <b>Permit Number</b>                 |  |
| <b>Name of Operator</b>              |  |
| <b>Location of Installation</b>      |  |
| <b>Location of the emission</b>      |  |
| <b>Time and date of the emission</b> |  |

| Substance(s) emitted | Media            | Best estimate of the quantity or the rate of emission | Time during which the emission took place |
|----------------------|------------------|---|---|
|                      | e.g. air         |   |   |
|                      | e.g. groundwater |   |   |

|   |  |
|---|--|
| 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**

|                                 |  |
|---------------------------------|--|
| <b>Permit Number</b>            |  |
| <b>Name of Operator</b>         |  |
| <b>Location of Installation</b> |  |

|  |  |
|--|--|
| 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**

| <b>Pollutant</b> | <b>1<sup>st</sup> 1/2 hour</b> | <b>2<sup>nd</sup> 1/2 hour</b> | <b>3<sup>rd</sup> 1/2 hour</b> | <b>4<sup>th</sup> 1/2 hour</b> | <b>5<sup>th</sup> 1/2 hour</b> | <b>6<sup>th</sup> 1/2 hour</b> | <b>7<sup>th</sup> 1/2 hour</b> | <b>8<sup>th</sup> 1/2 hour</b> |
|------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
|                  |                                |                                |                                |                                |                                |                                |                                |                                |
|                  |                                |                                |                                |                                |                                |                                |                                |                                |
|                  |                                |                                |                                |                                |                                |                                |                                |                                |
|                  |                                |                                |                                |                                |                                |                                |                                |                                |
|                  |                                |                                |                                |                                |                                |                                |                                |                                |
|                  |                                |                                |                                |                                |                                |                                |                                |                                |
|                  |                                |                                |                                |                                |                                |                                |                                |                                |
|                  |                                |                                |                                |                                |                                |                                |                                |                                |

|                  |  |
|------------------|--|
| <b>Name*</b>     |  |
| <b>Post</b>      |  |
| <b>Signature</b> |  |
| <b>Date</b>      |  |

\* authorised to sign on behalf of *[OPERATOR NAME]*

## Schedule 2

### Reporting of monitoring data

Parameters for which reports shall be made, in accordance with conditions 4.1.2 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 mg m <sup>-3</sup> continuous emissions monitoring data                                       | A1                    | Monthly                 | 01/01/2006           |
| Sulphur dioxide mg m <sup>-3</sup> periodic monitoring data   | A1                    | Every 6 months          | 01/01/2006           |
| Total Organic Carbon (TOC) mg m <sup>-3</sup> continuous emissions monitoring data                            | A1                    | Monthly                 | 01/01/2006           |
| Total Organic Carbon (TOC) mg m <sup>-3</sup> periodic monitoring data  | A1                    | Every 6 months          | 01/01/2006           |
| Oxides of nitrogen continuous emissions monitoring data<br>mg m <sup>-3</sup>                                 | A1                    | Monthly                 | 01/01/2006           |
| Oxides of nitrogen periodic monitoring data<br>mg m <sup>-3</sup>   | A1                    | Every 6 months          | 01/01/2006           |
| Gaseous chlorides as HCl continuous emissions monitoring data<br>mg m <sup>-3</sup>                           | A1                    | Monthly                 | 01/01/2006           |
| Gaseous chlorides as HCl periodic monitoring data mg m <sup>-3</sup>  | A1                    | Every 6 months          | 01/01/2006           |
| Gaseous fluorides as HF periodic monitoring data mg m <sup>-3</sup>   | A1                    | Every 6 months          | 01/01/2006           |
| Particulate Matter continuous emissions monitoring data mg m <sup>-3</sup>                                    | A1                    | Monthly                 | 01/01/2006           |
| Particulate Matter periodic monitoring data mg m <sup>-3</sup>  | A1                    | Every 6 months          | 01/01/2006           |
| Carbon Monoxide continuous emissions monitoring data mg m <sup>-3</sup>                                       | A1                    | Monthly                 | 01/01/2006           |
| Carbon Monoxide periodic monitoring data mg m <sup>-3</sup>   | A1                    | Every 6 months          | 01/01/2006           |
| Cadmium & Thallium and their compounds (total)  | A1                    | Every 6 months          | 01/01/2006           |
| Mercury and its compounds   | A1                    | Every 6 months          | 01/01/2006           |
| Antimony, Arsenic, Lead, Chromium, Cobalt, Copper, Manganese, Nickel and Vanadium and their compounds (total) | A1                    | Every 6 months          | 01/01/2006           |
| Dioxins / furans (I-TEQ)  | A1                    | Every 6 months.         | 01/01/2006           |
| Dioxins/Furans (WHO-TEQ Humans / Mammals)   | A1                    | Every 6 months.         | 01/01/2006           |
| Dioxin/Furans (WHO-TEQ Fish)  | A1                    | Every 6 months.         | 01/01/2006           |

**Table S2: Reporting of monitoring data**

| Parameter   | Emission point   | Reporting period                                | Period begins |
|---|--|---|---------------|
| Dioxin/Furans (WHO-TEQ Birds)   | A1   | Every 6 months.                                 | 01/01/2006    |
| Dioxin-like PCBs (WHO-TEQ Humans / Mammals)   | A1   | Every 6 months.                                 | 01/01/2006    |
| Dioxin-like PCBs (WHO-TEQ Fish)   | A1   | Every 6 months.                                 | 01/01/2006    |
| Dioxin-like PCBs (WHO-TEQ Birds)  | A1   | Every 6 months.                                 | 01/01/2006    |
| Poly-cyclic aromatic hydrocarbons (PAHs)  | A1   | Every 6 months.                                 | 01/01/2006    |
| Ammonia   | A1   | Every 6 months                                  | 01/01/2006    |
| Nitrous Oxide   | A1   | Every 6 months                                  | 01/01/2006    |
| Temperature   | A1   | As requested by Agency site inspector.          | 01/01/2006    |
| Pressure  | A1   | As requested by Agency site inspector.          | 01/01/2006    |
| Oxygen content  | A1   | As requested by Agency site inspector.          | 01/01/2006    |
| Water vapour content  | A1   | As requested by Agency site inspector.          | 01/01/2006    |
| Furnace Chamber Temperature   | Furnace – as specified in response to C2.1.5 of variation application. | As requested by Agency site inspector.          | 01/01/2006    |
| Wind Speed and Direction  | Site   | As requested by Agency site inspector.          | 01/01/2006    |
| 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.                                 | 01/01/2006    |
| 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 | 01/01/2006    |
| LOI (Alternative to TOC)  | Bottom Ash   | Monthly   | 01/01/2006    |
| 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.                                 | 01/01/2006    |
| 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 | 01/01/2006    |
| pH  | S1   | Every 6 months                                  | 01/01/2006    |
| Chemical Oxygen Demand  | S1   | Every 6 months                                  | 01/01/2006    |
| Oil and Grease  | S1   | Every 6 months                                  | 01/01/2006    |
| Total Suspended Solids  | S1   | Every 6 months                                  | 01/01/2006    |

**Table S2: Reporting of monitoring data**

| Parameter   | Emission point | Reporting period | Period begins |
|---|----------------|------------------|---------------|
| Mercury and its compounds (in total)  | S1             | Every 6 months   | 01/01/2006    |
| Cadmium and its compounds (in total)  | S1             | Every 6 months   | 01/01/2006    |
| Total other metals and their compounds (Iron, Zinc, Copper, Nickel, Manganese, Chromium, Lead, Tin and Arsenic – taken together) mg/l | S1             | Every 6 months   | 01/01/2006    |
| Flow (l.s <sup>-1</sup> )   | S1             | Every 6 months   | 01/01/2006    |
| Performance indicators as set out in Schedule 4   | Installation   | Every 12 months  | 01/01/2006    |
| Water usage   | Installation   | Every 12 months  | 01/01/2006    |
| Energy usage  | Installation   | Every 12 months  | 01/01/2006    |
| Waste disposal and/or recovery.   | Installation   | Every 12 months  | 01/01/2006    |

## Schedule 3 - Forms to be used

Unless otherwise agreed in writing between Agency and the Operator, the following Agency forms are to be used for reports submitted to Agency.

| <b>Table S3: Reporting Forms</b>                            |   |                     |
|---|---|---------------------|
| <b>Media or parameter</b>                                   | <b>Form Number</b>  | <b>Date of Form</b> |
| Air: Periodic monitored emissions quarterly                 | Agency Form / BM4082 / A1 / Form dated 21st December 2005   | 21st December 2005  |
| Air: Periodic monitored emissions biannually                | Agency Form / BM4082 / A2 / Form dated 21st December 2005   | 21st December 2005  |
| Air: Continuously monitored emissions of particulates       | Agency Form / BM4082 / A3 / Form dated 21st December 2005   | 21st December 2005  |
| Air: Continuously monitored emissions of Hydrogen chloride  | Agency Form / BM4082 / A4 / Form dated 21st December 2005   | 21st December 2005  |
| Air: Continuously monitored emissions of TOC                | Agency Form / BM4082 / A5 / Form dated 21st December 2005   | 21st December 2005  |
| Air: Continuously monitored emissions of Carbon monoxide    | Agency Form / BM4082 / A7 / Form dated 21st December 2005   | 21st December 2005  |
| Air: Continuously monitored emissions of Sulphur dioxide    | Agency Form / BM4082 / A8 / Form dated 21st December 2005   | 21st December 2005  |
| Air: Continuously monitored emissions of Oxides of nitrogen | Agency Form / BM4082 / A9 / Form dated 21st December 2005   | 21st December 2005  |
| Sewer: monitoring data                                      | Agency Form / BM4082 / S1 / Form dated 21st December 2005   | 21st December 2005  |
| Bottom Ash, APC Residues: Composition                       | Agency Form / BM4082 / Ash1 / Form dated 21st December 2005 | 21st December 2005  |
| Bottom Ash, APC Residues: Solubility                        | Agency Form / BM4082 / Ash2 / Form dated 21st December 2005 | 21st December 2005  |
| Energy  | Agency Form / BM4082 / E1 / Form dated 21st December 2005   | 21st December 2005  |
| Waste Return  | Agency Form / BM4082 / R1 / Form dated 21st December 2005   | 21st December 2005  |
| Water usage   | Agency Form / BM4082 / WU1 / Form dated 21st December 2005  | 21st December 2005  |
| Performance indicators                                      | Agency Form / BM4082 / PI1 / Form dated 21st December 2005  | 21st December 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                     | tonnes |
| Total Commercial Waste Incinerated                    | tonnes |
| Total separately collected fraction waste incinerated | tonnes |
| Electrical energy exported                            | KWhrs  |
| Electrical energy used on installation                | KWhrs  |
| Other energy produced by 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 (dry basis)          |
| Electrical energy generated                      | Quarterly                      | KWhrs / tonne of waste incinerated (dry basis)          |
| Fuel oil consumption                             | Quarterly                      | kg/ tonne of waste incinerated (dry basis)              |
| Gas consumption                                  | Quarterly                      | M <sup>3</sup> /tonne of waste incinerated              |
| Mass of Bottom Ash produced                      | Quarterly                      | kg/ tonne of waste incinerated (dry basis)              |
| Mass of APC residues produced                    | Quarterly                      | kg/ tonne of waste incinerated (dry basis)              |
| Urea consumption                                 | Quarterly                      | kg/ tonne of waste incinerated (dry basis)              |
| Activated Carbon consumption                     | Quarterly                      | kg/ tonne of waste incinerated (dry basis)              |
| Lime consumption                                 | Quarterly                      | kg/ tonne of waste incinerated (dry basis)              |
| Water consumption                                | Quarterly                      | m <sup>3</sup> / tonne of waste incinerated (dry basis) |
| Pollutants to air per tonne of waste incinerated | Quarterly                      | m <sup>3</sup> / tonne of waste incinerated (dry basis) |

## Schedule 5 - List of Permitted Wastes

| Permitted Waste Types  |  |   |   |
|--|--|---|---|
| Description  | European Waste Catalogue Number (where available) or other specification | Limitations   | Waste type as defined in Table 2.3.2                                      |
| Waste from food preparation - animal tissue waste  | 200202   | Reject foodstuff from processing facilities/supermarkets including meat products and packaged/loose food items which are beyond use-by date, condemned, contaminated or unfit for consumption; not including meat & bone meal, tallow, whole/part ruminant animal carcasses. <sup>(2) (3)</sup> | Non-hazardous commercial and industrial wastes                            |
| Waste from food preparation – materials unsuitable for consumption/processing  | 200203   |   |   |
| Healthcare waste – wastes where collection and disposal is not subject to special requirements in order to prevent infection | 180104   | HSAC Category E healthcare waste, not including yellow bag clinical waste. <sup>(2) (3)</sup>   |   |
| Waste from waste and water treatment – other wastes from mechanical treatment of wastes other than those mentioned in 191211 | 191212   | Residues from Onyx-operated MRF. <sup>(1) (2) (3)</sup>   |   |
| Waste packaging – adsorbents, filters and protective clothing not contaminated by dangerous substances.                      | 150203   | <sup>(1) (2) (3)</sup>  |   |
| Waste packaging – paper and cardboard packaging  | 150101   | <sup>(1) (3) (4)</sup>  | Separately collected fractions of packaging and related wastes            |
| Waste packaging – mixed packaging  | 150106   | <sup>(1) (3) (4)</sup>  |   |
| Waste packaging – textile packaging <sup>(1)</sup>   | 150109   | <sup>(1) (3) (4)</sup>  |   |
| Municipal Wastes – paper and cardboard   | 200101   | <sup>(1) (3) (5)</sup>  | Municipal waste - separately collected fractions and biodegradable waste. |
| Municipal Wastes – biodegradable kitchen waste   | 200108   | <sup>(1) (3) (5)</sup>  |   |
| Municipal Wastes – clothes   | 200110   | <sup>(1) (3) (5)</sup>  |   |
| Municipal Wastes – textiles  | 200111   | <sup>(1) (3) (5)</sup>  |   |
| Municipal Wastes – wood  | 200138   | Excluding MDF, plywood and sawdust. <sup>(1) (3) (5)</sup>  |   |
| Municipal Wastes – plastics  | 200139   | Not including PVC <sup>(1) (3) (5)</sup>  |   |
| Garden and Park waste – biodegradable waste  | 200201   | <sup>(1) (3) (5)</sup>  |   |

|  |        |     |                       |
|--|--------|-----|-----------------------|
| Other municipal waste – mixed municipal waste    | 203001 |     | Mixed municipal waste |
| Other municipal waste – waste from market        | 200302 | (3) | Other municipal waste |
| Other municipal waste – street cleaning residues | 200303 | (3) |                       |
| Other municipal waste – bulky waste              | 200307 | (3) |                       |

Note 1: The incineration of MRF rejects and separately collected wastes must be recorded and justified in all cases. All such records shall be available for inspection.

Note 2: No more than 5 000 tonnes/annum of each of these wastes shall be incinerated.

Note 3: Total incineration of *all* Note 3 wastes shall be less than 20 % of total annual waste input.

Note 4: Total incineration of *all* Note 4 wastes shall not exceed 5 000 tonnes per annum.

Note 5: Total incineration of *all* Note 5 wastes shall not exceed 5 000 tonnes per annum.

**END OF PERMIT**