Permit with introductory note

Pollution Prevention and Control Regulations 2000

Fawley High Temperature Incinerator

Pyros Environmental Limited
Charlestone Road
Hardley
Hythe
Southampton
SO45 3ZA

Permit number

HP3835UZ

Introductory note

This introductory note does not form a part of the Permit.

The following Permit is issued under Regulation 18 of The Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I.2000 No. 1973 (as amended) (the Regulations) to transfer a Permit issued under the Regulations to operate an installation.

The Permit 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 PPC 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.

The main purpose of the activity at the installation is:-

The site is a hazardous waste incinerator. The site has been processing hazardous waste since 1977. The currently operated High temperature incineration plant (HTI) was commissioned in 1990. The site undertakes operations and activities undertaken in the treatment of hazardous waste including:

- The administration of waste management activities;
- The reception, storage and preparation of wastes prior to incineration;
- The sorting and repackaging of wastes that are not destined or suitable for incineration;
- The incineration process;
- The exhaust gas cleaning process;
- The treatment and handling of liquid effluents; and
- The handling of solid waste residues

The HTI Plant is designed to process approximately 45,000 tonnes of hazardous waste per annum. The plant also disposes of small quantities of low level radioactive and clinical wastes. Waste is delivered to the site using road transport and is received in liquid, solid or sludge form, by bulk tanker, in drums, cardboard kegs, plastic or heavy duty paper sacks, small glass bottles, and in IBC containers. Wastes generally comprise off-specification raw materials or products, process effluents, unwanted by-products and time- expired products.

Waste materials commonly arise from the agrochemical, fine chemical, clinical (pharmaceutical), petrochemical or engineering industries. In addition, significant quantities of redundant chemicals in small quantities arise from the use in schools, universities and research and development establishments.

The HTI plant is rotary kiln design that has the capability of handling a wide range of wastes. The incineration process produces two primary waste streams: slag ash which is a combustion process waste and filter cake which is the solid waste extracted from the water used to clean the combustion gases.

The process is controlled by a semi-automatic system which ensures that the optimum operating conditions are maintained in order to meet emission limits set by the previous Authorisation. Automated control systems maintain the incineration process at the correct temperature and ensure that the waste residence time within the kiln is such that the waste is disposed of with due regard to environmental impact and compliance with permit conditions.

The site is operated on a 24-hour per day basis, with two shifts, and staffed by approximately 70 permanent staff.

Under the previous Authorisation the plant met all the emission limit values for releases to air under the Waste Incineration Directive. The operator applied for and was granted derogation for emission limits of suspended solids to water as permitted under this Directive up until the 1st January 2008.

The abatement plant used for gas cleaning consists of a quench tower, a packed tower absorber and

two wet electrostatic precipitators. The cleaned gases are pre-heated prior to release from the stack to reduce plume visibility. This is a wet system that uses water and caustic soda spraying.

The liquor arising from the gas cleaning process is treated in the Effluent Treatment Plant to neutralise the pH and to remove soluble metals and suspended solids prior to discharge to Southampton Water.

There are no emissions to groundwater from the site.

The site has a management system in place that comprises of policies, standards and procedures covering all the operations of the HTI. The operator also has an Environmental Management System and holds ISO 14001 accreditation.

The HTI does not have a waste heat boiler, to recover energy, due to the need to cool the gas rapidly to prevent the formation of dioxins and furans as a result of the highly chlorinated wastes being burnt.

A list of agreed “R Code” waste for use as a support fuel is included as Schedule 7 to this permit.

The HTI is a top tier COMAH site and has submitted a safety report to the Health and Safety Executive. The safety report includes a full accident management plan, which considers potential accidents caused by the failure of equipment and unavoidable stoppages.

Emissions from the flue stack are monitored using Continuous Emission Monitoring (CEM). This equipment operates continuously whilst waste is being burnt in the incinerator. Oxygen, pressure and temperature are also measured and recorded.

Emissions to Southampton water, from the Effluent Treatment Plant are via a v-notch weir tank adjacent to the effluent treatment plant. The effluent is monitored using an ultrasonic system.

Analytical tests are carried out on the filter cake and incinerator slag prior to determining the disposal or recycling route. These tests include testing for leachable metals, organic substances and loss on Ignition.

The permit has been consolidated into one document at transfer.

Other PPC Permits relating to this installation

Permit holder	Permit Number	Date of Issue
Not Applicable		

Superseded Licenses/Consents/Authorisations relating to this installation

Holder	Reference Number	Date of Issue
Shanks Chemical Services Limited	AG8047	28/05/93

Other existing Licences/Authorisations/Registrations relating to this site

Holder	Reference Number	Date of issue
Radioactive substances Authorisation	AL5160/BZ6759	17/10/05

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

Detail	Date	Response Date
Application ZP3632SR	31/03/05	
Request for additional air quality modelling data	Request dated 20/09/05	Response received 10/11/05 Additional response received 16/11/05
Application to transfer application from Shanks to Onyx	Request dated 8/11/05	Response dated 11/11/05
Response to request for information Schedule 4	Request dated 14/11/05	Response dated 22/11/05 (Part) Response dated 01/12/05 (Part)
Supplementary Information	Response received 23/11/05	
Request for information by e-mail for information on the mobile scrubber	Request dated 8/12/05	Response dated 9/12/05
Permit determined	21/12/05	
Variation	14/12/06	
Application to transfer Permit from Veolia ES Onyx Ltd to Pyros Environmental Ltd.	Received 5/3/07	

End of introductory Note

Permit

Pollution Prevention and Control
(England and Wales) Regulations 2000

ENVIRONMENT AGENCY

Permit

Permit number **(The Permit)**
HP3835UZ

The Environment Agency in exercise of its powers under Regulation 18 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I. 2000 No. 1973) (as amended), hereby transfers the Permit issued on 21 December 2005 to

Pyros Environmental Limited ("the Operator"),

Of/ whose Registered Office (or Principal Office) is

Charlestone Road
Hardley
Hythe
Southampton
Hampshire
SO45 3ZA

Company registration number 6015158

which relates to the operation of Installation at

Charlestone Road
Hardley
Hythe
Southampton
Hampshire
SO45 3ZA

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

Signed

Cantor Mocke

Authorised to sign on behalf of the Environment Agency

Date of transfer

2 May 2007

1 General

1.1 Permitted Activities

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

Table 1.1.1 - Permitted Activities

Activity listed in Schedule 1 of the PPC Regulations or Directly- Associated Activity	Description of specified activity	Limits of specified activity
Section 5.1A(1)(a) : Incineration of hazardous waste in an incineration plant	Incineration of hazardous wastes.	Receipt of waste, through storage, pre-treatment, waste fuel and air supply systems, on-site facilities for the treatment or storage of residues and waste water, stack devices and systems for controlling incineration operations, recording and monitoring incineration conditions.

1.2 Site

1.2.1 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the land shown edged in red on the Site Plan at Schedule 5 to this Permit but excluding the MBM waste to energy installation boundary outlined in green.

1.3 Overarching Management Condition

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

1.4 Improvement Programme

1.4.1 The Operator shall complete the improvements specified in Table 1.4.1 by the date specified in that table, and shall send written notification of the date of completion of each requirement to the Agency within 14 days of the completion of each such requirement.

Table 1.4.1: Improvement programme

Reference	Requirement	Date

Table 1.4.1: Improvement programme

Reference	Requirement	Date
1	The operator shall provide a justification to the Agency for the removal the bulk liquid tanks and replacing them with four smaller storage tanks designed for specific waste types, using the existing bunding infrastructure, as described in the application. This work shall not be undertaken unless the justification has been provided in writing to the Agency and the Agency has agreed in writing that the replacement of these tanks shall take place.	01/04/08
2	The operator shall investigate the use of lime enriched ash instead of caustic soda for the gas cleaning plant, from the neighbouring MBM plant. A report of this investigation shall be provided in writing to the Agency with recommendations for implementing any changes, if any, with timescales for completing the work. If implemented there shall be subsequent incorporation of disentrainment vessels between the Packed Tower Absorber and the Wet Electrostatic Precipitator to facilitate the use of lime instead of caustic soda. All work shall be completed by the timescales specified.	01/ 04/08
3	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_{10}, $PM_{2.5}$ and $PM_{1.0}$ 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.	Completed
4	The Operator shall calibrate and verify the performance of Continuous Emission Monitors for release points and parameters as specified in Table 2.2.2 to BS EN 14181 and submit a summary report to the Environment Agency as evidence of compliance with the requirements of BS EN 14181.	Report to be submitted to the Agency by 28/12/06.
5	The Operator shall provide to the Agency a report on the improvements required to achieve the emission levels of suspended solids to water which are required from 01/01/2008. The report shall propose a plan and timescale for implementation of the improvements and demonstrate how they represent BAT for the Permitted Installation.	Report to be submitted to the Agency by the earlier of 01/01/07 or 6 months before the proposed installation date.

Table 1.4.1: Improvement programme

Reference	Requirement	Date
6	The operator shall investigate the feasibility of modifying the rotary kiln sealing to reduce the likelihood of fugitive emissions to air and provide a written report to the Agency making recommendations for improving the seals with timescales for implementation. The recommendations of this report shall be implemented within the timescales specified within this report.	Completed
7	The operator shall investigate the feasibility of improving the wet Electrostatic Precipitators wash down system and provide a written report to the Agency with recommendations for improving the wash down system with timescales. The recommendations of this report shall be implemented within the timescales specified within this report.	Completed
8	The operator shall undertake an energy audit including a review of energy efficiency measures within site buildings. A copy of this report shall be provided in writing to the Agency. As a minimum this report shall identify energy efficiency measures that will implemented with appropriate timescales for implementation. All recommendations in this report shall be implemented within the timescales suggested.	31/12/07
9	The operator shall provide the Agency with a report assessing the technologies for additional heat recovery. As a minimum this report shall identify the technologies available and make recommendations as to whether this technology shall be used on site with appropriate timescales for installation. All recommendations in this report shall be implemented within the timescales suggested.	31/12/07
10	The operator shall compare existing waste pre-acceptance and acceptance procedures against recommendations specified in Environment Agency sector guidance note IPPC S5.06, pages 19-32, and submit a report to Agency highlighting any differences from existing procedures and the recommendations. This report shall make recommendations for revising existing waste pre-acceptance and acceptance procedures with a timetable for revising the procedures, if necessary. Changes to these procedures shall be implemented in accordance with the timetable.	31/12/06
11	The operator shall install a turbidity meter in accordance with the response given to the Schedule 4 Notice dated 7/11/05.	Completed

Table 1.4.1: Improvement programme

Reference	Requirement	Date
12	The operator shall agree a "trigger level" related to turbidity readings with the Agency at which effluent discharge shall cease	Completed
13	The operator shall submit a report specifying a monitoring methodology for suspended solids. Monitoring for this parameter shall be undertaken after this date in accordance with the frequency specified in this permit.	Completed
14	The Operator shall develop an odour management plan, having regard to Environment Agency Horizontal Guidance H4. The plan shall as a minimum identify all potential sources of odour and options available to reduce or eliminate odour emissions from the Installation. A summary report shall be submitted in writing to the Agency, along with a timetable for the implementation of improvements identified.	Completed
15	The operator shall develop a procedure for replacing the carbon filters used to reduce emissions from waste and fuel tanks during plant shut down. This procedure shall consider, as a minimum, at what frequency the filters shall be replaced and where they shall be disposed of/ recycled.	Completed
16	The operator shall undertake an assessment to determine the most appropriate technique to reduce NOx levels on the site and provide a written report of this assessment and its conclusions to the Agency	01/01/07
17	All hard-standing and bunded storage areas shall be repaired/ refurbished, where necessary, so that all bunded areas are capable of containing 110% capacity of the largest tank contained within the bund and shall be impermeable to the materials contained therein. Hardstanding areas shall be repaired/ refurbished so that they are impermeable to any chemical that may be stored on it. All bunds shall be rendered or treated so that they are resistant to the material that they contain.	01/01/07
18	The Operator shall review the continuous emissions monitoring arrangements with the view to moving from the demonstration of compliance with the 97%ile half hourly average emission limits included within this Permit, to demonstrating 100% compliance with ten minute average emission limit values in column A of Annex V of the Waste Incineration Directive. A written summary report of the review shall be submitted to the Environment Agency detailing the improvements identified and a timetable for their implementation. As a minimum	Completed

Table 1.4.1: Improvement programme

Reference	Requirement	Date
	this timetable shall include replacement of end of life equipment / monitors with equipment / monitors that can achieve the requirements of this permit and demonstration of compliance with the 100% emission limit value identified in Column A of Annex V of the Waste Incineration Directive.	
19	The operator shall provide the Agency with a written report detailing how the operator intends to meet the emissions levels for the parameters in Tables 2.2.5 and 2.2.5a that must be achieved by the 31/12/07	31/01/07

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

1.5 Minor Operational Changes

1.5.1 The Operator shall seek the Agency's written agreement to any minor operational changes under condition 2.1.1 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.

1.5.2 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.

1.5.3 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.

1.5.4 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 and the Site Protection and Monitoring Programme, as the case may be shall be deemed to be amended.

1.6 Pre-Operational Conditions

1.6.1 There are no pre-operational conditions

1.7 Off-site Conditions

1.7.1 There are no off-site conditions

2 Operating conditions

2.1 In-Process Controls

2.1.1 The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 2.1.1, or as otherwise agreed in writing by the Agency in accordance with conditions 1.5.1 and 1.5.2 of this Permit.

Table 2.1.1: Operating techniques

Description	Parts	Date Received
Application	The response to questions 2.1, 2.2 and 2.10 and given in pages 221- 228 of the Application	31/05/05
Response to Schedule 4 Notice	The response to questions 1,3,4,6,7, 11-18, 25, 28-35, 38, 41-43, 45 and 49	22/11/05 and 01/12/05
Response to e-mail dated 8/12/05	Entire e-mail	9/12/05

2.1.2 The Permitted Installation shall, subject to the other conditions of this Permit, be operated using the techniques and in the manner described in the Site Protection and Monitoring Programme submitted under condition 4.1.8 of this Permit or as otherwise agreed in writing by the Agency.

2.1.3 Without prejudice to other conditions of this permit only the wastes specified in Schedule 6 shall be incinerated in the Permitted Installation subject to the limitations in quantities not exceeding those specified for the waste types specified in Table 2.1.2.

Table 2.1.2: Permitted Waste Types

Waste type	Limitations	Maximum throughput
Wastes resulting from exploration, mining, quarrying, physical and chemical treatment of minerals	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit.	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.

Table 2.1.2: Permitted Waste Types

Waste type	Limitations	Maximum throughput
Wastes from the leather, fur and textile industries	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Wastes from inorganic chemical processes	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Wastes from organic chemical processes	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Wastes from organic chemical processes	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Wastes from the photographic industry	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Wastes from thermal processes	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Wastes from shaping and physical and mechanical surface treatment of metals and plastics	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Oil wastes and wastes of liquid fuels (except edible oils, 05 and 12)	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Waste organic solvents, refrigerants and propellants (except 07 and 08)	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Wastes not otherwise specified in the list	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Construction and demolition wastes (including excavated soil from contaminated sites)	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.

Table 2.1.2: Permitted Waste Types

Waste type	Limitations	Maximum throughput
Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	As identified in Schedule 6, but subject to condition 2.1.14 and 2.1.15 of this permit	Combined total with other wastes in this table shall not exceed 45,000 tonnes per annum.
Any waste authorised under the Radioactive Substances Act 1993		

2.1.4 The Operator shall incinerate only those hazardous wastes where the throughputs, calorific values and pollutant composition are within the ranges specified in the Application.

2.1.5 The Operator shall ensure that prior to accepting waste subject to condition 2.1.4 at the Permitted Installation, it has obtained sufficient information about the hazardous wastes to be burned to demonstrate compliance with the characteristics described in condition 2.1.4.

2.1.6 The Operator shall take representative samples of all hazardous waste deliveries to the Permitted Installation unless otherwise agreed in writing with Agency and test a representative selection of these samples to verify conformity with the information obtained as required by condition 2.1.5. These samples shall be retained for inspection by the Agency for a period of at least one month after the material is incinerated.

2.1.7 Waste shall not be charged, or shall cease to be charged, into the incinerator if:

- the combustion chamber temperature is below, or falls below, a temperature of 900 °C (or 1100°C if the hazardous waste contains more than 1% of halogenated organic substances); or
- any continuous emission limit value in Table 2.2.2(a) is exceeded; or
- any continuous emission limit value in Table 2.2.2 is exceeded, other than under abnormal operating conditions ; or
- monitoring results required to demonstrate compliance with any continuous emission limit value in Table 2.2.2 are unavailable other than under abnormal operating conditions.

2.1.8 The Operator shall operate at least one auxiliary burner at start-up or shut-down or whenever the operating temperature falls below that specified in condition 2.1.7, as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.1.7 is maintained in the combustion chamber, such burner(s) shall be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.

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

2.1.10 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.

2.1.11 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 2.2.2, or continuous emission monitor(s) or continuous effluent monitoring device(s) are out of service, as the case may be, for a total of four hours uninterrupted duration;
- the cumulative duration of abnormal operation periods over one calendar year exceeds 60 hours on an incineration line;
- continuous measurement shows that an emission exceeds any emission limit value in Table 2.2.2 (a);
- the alternative techniques to demonstrate compliance with the abnormal operation emission limit value(s) in Table 2.2.2 (a), as detailed in the Application or as agreed in writing with the Agency, are unavailable.

2.1.12 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.

2.1.13 Infectious clinical waste shall be placed in the furnace without first being mixed with other categories of waste, using techniques which are no less effective than those described in the Application.

2.1.14 Wastes which, in the opinion of the Agency, differ significantly from the normal range of feedstocks previously received and processed on site, shall be referred to the Agency at the Reporting Address and shall be subject to discussion between the operator and the Agency and require the written agreement of the latter. Such wastes are likely to be subject to the requirement for a test burn. Polychlorinated biphenyls shall be taken as new materials, except when present in other wastes at levels less than 500 ppm by weight.

When notifying the Agency, detailed information shall be provided relating to:-

a The nature, composition, packaging, of any such waste;

b The consignment weight or volume;

c The proposed method of sampling and assaying the waste and of holding the waste on site prior to incineration;

d The proposed method of packaging the waste for incineration, the maximum size of any package of the waste to be delivered to the incinerator together with the maximum proposed frequency of the charging of such packages to the incinerator, or, alternatively, in the case of bulk liquid wastes or drummed Hazardous wastes, the maximum proposed continuous feed rate to the incinerator; and

e The ability of the incineration system and the gas and liquid effluent treatment systems to process such waste in a manner, which fully accords with conditions given elsewhere in this permit. Proposals for a test burn programme shall be included.

No such wastes shall be processed in the incineration system without written agreement from the Agency.

2.1.15 The following wastes and waste type shall only be incinerated subject to the conditions listed below:

a The feed to the incinerator shall not consist of more than 22% halogens of which no more than 35kgs/hr should consist of bromine. Iodated waste may only be processed at a rate less than 4kg/hr for liquid wastes or 4kg per solid batch.

Any increases above this rate shall be subject to satisfactory performance at a level agreed in writing with the Agency and shall be subjected to a comprehensive incineration trial.

b Quantities of carcinogenic substances listed under item 1 of Schedule 2 of the Control of Substances Hazardous to Health Regulations 2002 (Statutory Instrument 2002 No.2677) greater than 1 kilogram shall first be notified to the Agency and then subjected to an incineration trial.

c Cresol lights for the manufacture of para chloro ortho cresol shall only be processed if subject to a storage and incineration trial agreed in writing with the Agency.

2.1.16 Feed rates of all wastes shall be measured and recorded.

2.1.17 A stand-by emergency generator shall be made available and used that will allow controlled burn off of wastes or controlled shut-down if there is insufficient power in the event of a power failure in the kiln until full power is restored or a controlled shut down completed.

2.1.18 The full essential (emergency) shut down system fitted to the incineration system shall only be tested during a plant start-up period, prior to the addition of any waste to the incineration system or as otherwise agreed in writing by the Agency.

2.1.19 Only those wastes listed in Schedule 7, which meet the specifications for substitute fuel set out in the letter dated 6 April 2006, shall be used as a fuel in the auxiliary burner.

2.2 Emissions

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

2.2.1.1 This Part 2.2.1 of this Permit shall not apply to releases of odour, noise or vibration.

2.2.1.2 Emissions to air from the emission points in Table 2.2.1 shall only arise from the source(s) specified in that Table.

Table 2.2.1 : Emission points to air

Emission point reference or description	Source	Location of emission point
A1	37.5m flue dedicated to Chemical Hazardous Waste Incinerator following conditioning with a preheated stream of air	A1 on drawing ASR 5 submitted with the Application
A2	37.5m flue dedicated to Emergency vent	A2 on drawing ASR 5 submitted with the application
A3	11.5 m vent pipe from Waste Anhydrous Ammonia System Purge Pot	A3 on drawing ASR 5 submitted with the application
A4	4m stack on mobile scrubber	Within installation

2.2.1.3 The limits for emissions to air for the parameter(s) and emission point(s) set out in Table 2.2.2 shall not be exceeded except during a period of abnormal operation. During a period of abnormal operation, the limits for emissions to air for the parameter(s) and emission point(s) set out in Table 2.2.2 (a) shall not be exceeded.

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

Emission point reference	Parameter	Limit (including Reference Period)[1]	Monitoring frequency	Monitoring method
A1	Particulate matter	30 mg/m^3 ½-hr average	Continuous measurement	BS EN 13284-2 [6] [8]
A1	Particulate matter	10 mg/m^3 daily average	Continuous measurement	BS EN 13284-2 [6] [8]
A1	Particulate matter	30 mg/m^3 periodic over minimum 1-hour period	Bi-annual	BS EN 13284-1 (Note: Alternative methods and standards, specified within TGN M2, may be agreed in writing with the Agency if justified)
A1	Total Organic Carbon (TOC)	20 mg/m^3 ½-hr average	Continuous measurement	BS EN 12619 [6] [8]
A1	Total Organic Carbon (TOC)	10 mg/m^3 daily average	Continuous measurement	BS EN 12619 [6] [8]
A1	Total Organic	20 mg/m^3	Bi-annual	BS EN 12619

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

Emission point reference	Parameter	Limit (including Reference Period)[1]	Monitoring frequency	Monitoring method
	Carbon (TOC)	periodic over minimum 1-hour period		
A1	Hydrogen chloride	60 mg/m^3 ½-hr average	Continuous measurement	MCERTS certified instruments[7 9]
A1	Hydrogen chloride	10 mg/m^3 daily average	Continuous measurement	MCERTS certified instruments[7 9]
A1	Hydrogen chloride	60 mg/m^3 periodic over minimum 1-hour period	Bi-annual	BS EN 1911(Note: Alternative methods and standards, specified within TGN M2, may be agreed in writing with the Agency if justified)
A1	Hydrogen fluoride	1mg/m^3 periodic over minimum 1-hour period	Bi-annual	USEPA Method 26/26A (Note: Alternative methods and standards, specified within TGN M2, may be agreed in writing with the Agency if justified)
A1	Carbon monoxide	150 mg/m^3 10 minute average[10]	Continuous measurement	ISO 12039 [4 8]
A1	Carbon monoxide	50 mg/m^3 daily average	Continuous measurement	ISO 12039 [4 8]
A1	Carbon monoxide	100 mg/m^3 periodic over minimum 4 hour period, data to be reported as ½-hour averages	Bi-annual	ISO 12039(Note: Alternative methods and standards, specified within TGN M2, may be agreed in writing with the Agency if justified)
A1	Sulphur dioxide	200 mg/m^3 ½-hr average	Continuous measurement	BS 6069-4.4[5 8]
A1	Sulphur dioxide	50 mg/m^3	Continuous measurement	BS 6069-4.4[5 8]

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

Emission point reference	Parameter	Limit (including Reference Period)[1]	Monitoring frequency	Monitoring method
		daily average		
A1	Sulphur dioxide	200 mg/m^3 periodic over minimum 4 hour period, data to be reported as ½ hour averages	Bi-annual	BS 6069-4.4(Note: Alternative methods and standards, specified within TGN M2, may be agreed in writing with the Agency if justified)
A1	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	350 mg/m^3 daily average	Continuous measurement	ISO 10849[5 8]
A1	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	400 mg/m^3 ½-hr average (after 1st January 2007)	Continuous measurement	ISO 10849[5 8]
A1	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	350 mg/m^3 periodic over minimum 4 hour period, data to be reported as ½ hour averages	Bi-annual	ISO 10849 or BS ISO 11564(Note: Alternative methods and standards, specified within TGN M2, may be agreed in writing with the Agency if justified)
A1	Cadmium & thallium and their compounds (total) [2]	0.05 mg/m^3 periodic over minimum 30 minute, maximum 8 hour period	Bi-annual	BS EN 14385
A1	Mercury and its compounds [2]	0.05 mg/m^3 periodic over minimum 30 minute, maximum 8 hour period	Bi-annual	BS EN 13211
A1	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and	0.5 mg/m^3 periodic over minimum 30	Bi-annual	BS EN 14385

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

Emission point reference	Parameter	Limit (including Reference Period)[1]	Monitoring frequency	Monitoring method
	their compounds (total)[2]	minute, maximum 8 hour period		
A1	Dioxins / furans (I-TEQ)	0.1 ng/m^3 periodic over minimum 6 hours, maximum 8 hour period[3]	Bi-annual	BS EN 1948

Note 1: See Section 6 for reference conditions
Note 2: Metals include gaseous, vapour and solid phases as well as their compounds (expressed as the metal or the sum of the metals as specified). Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V mean antimony, arsenic, lead, chromium, cobalt, copper, manganese, nickel and vanadium respectively.
Note 3: The I-TEQ sum of the equivalence factors to be reported as a range based on: All congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum.
Note 4: The Continuous Emission Monitors used shall be such that the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed 10%. Valid half-hourly average values shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted this value of the confidence interval (10%). Where it is necessary to calibrate or maintain the monitor and this means that data is not available for a complete half-hour period, the half-hourly average shall nonetheless be considered valid if measurements are available for a minimum of 20 minutes during the half-hour period. (The number of half-hourly averages so validated shall not exceed 8 per day). Daily average values shall be determined as the average of all the valid half-hourly average values within a calendar day. The daily average value will be considered valid if no more than five half-hourly average values in any day have been determined not to be valid. No more than ten daily average values per year shall be determined not to be valid.
Note 5: As Note 4, except that the value of the confidence interval is 20% in place of 10%.
Note 6: As Note 4, except that the value of the confidence interval is 30% in place of 10%.
Note 7: As Note 4, except that the value of the confidence interval is 40% in place of 10%.
Note 8: MCERTS certification to the appropriate ranges and determinands is a demonstration of compliance to the applicable standards.
Note 9: The certification range for MCERTS equipment should be 1.5 times the daily emission limit value. The CEM shall also be able to measure instantaneous values over the ranges that are to be expected during all operating conditions. If it is necessary to use more than one range setting of the CEM to achieve this requirement, the CEM shall be verified for monitoring supplementary, higher ranges.
Note 10: 95% of all measurements in a year determined as a 10 minute average shall not exceed the emission limit value.

Table 2.2.2 (a) : Emission limits to air and monitoring during abnormal operating conditions

Emission point reference	Parameter	Limit (including Reference Period)[1]	Monitoring frequency	Monitoring method
A1 A2	Particulate matter	150 mg/m^3 ½-hr average	Continuous measurement	BS EN 13824-2[4] [2] during abatement plant failure or alternative surrogate using duplicate CEMs specified in the Application during failure of the continuous emission monitor
A1 A2	Total Organic Carbon	20 mg/m^3 ½-hr average	Continuous measurement	BS EN 12619[4] [2] during abatement plant failure

	(TOC)			or alternative surrogate using duplicate CEMs specified in the Application during failure of the continuous emission monitor
A1 A2	Carbon monoxide	100 mg/m^3 ½-hr average	Continuous measurement	ISO 12039[4 3] during abatement plant failure or alternative surrogate using duplicate CEMs specified in the Application during failure of the continuous emission monitor

Note 1: See Section 6 for reference conditions
Note 2: The Continuous Emission Monitors used shall be such that the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed 30%. Valid half-hourly average values shall be determined within the effective operating time (excluding the start-up and shut-down periods 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 8 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.

2.2.1.4 No condition applies.

2.2.1.5 The operation of the incineration system and the gas treatment plant shall ensure that the concentration of free bromine or free iodine in the stack gases does not give rise to stack gas plume colouration attributable to the presence of these substances.

2.2.1.6 Only anhydrous ammonia wastes purged from transfer lines after a delivery shall be released into air from the purge pot vent pipe 11.5m above ground (Release Point A3) under normal operating conditions. The time, date and quantity of such releases shall be recorded and available for inspection by the Agency.

2.2.1.7 The Operator shall have in place for the Mobile Scrubber referred to in Table 2.2.1 appropriate procedures to ensure

a the scrubber extraction fan cannot be operated without the recirculation pump in operation.

b the scrubbing medium remains at sufficient strength whilst in use.

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

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

2.2.2.2 Conditions 2.2.2.3 - 2.2.2.6 shall not apply to emissions to sewer.

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

Table 2.2.4: Emission point to water

Emission Point Reference or description	Source	Receiving Water

W1	Release into controlled water from v-notch weir at SU43282 05789 connected to effluent treatment batch holding tanks.	Southampton Water
W2	Surface water releases into controlled waters at the weighbridge at SU4344 05753 from the land and premises not identified as suspect or contaminated.	Southampton Water

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

2.2.2.5 Where a substance is specified in Table 2.2.5 and 2.2.5a but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.

TABLE 2.2.5

Release Point	**W1**
Substance	**Maximum concentration** Note 3 **µg/l (except where otherwise specified)**
Cadmium and its compounds as Cd	20
Cadmium and its compounds as Cd[1]	12.5
Mercury and its compounds as Hg	10
Mercury and its compounds as Hg[1]	2
Chromium and its compounds as Cr	125
Chromium and its compounds as Cr[1,]	40
Copper and its compounds as Cu	450
Copper and its compounds as Cu[1,]	275
Nickel and its compounds as Ni	100
Lead and its compounds as Pb	200
Zinc and its compounds as Zn	675
Zinc and its compounds as Zn[1]	150
Aluminium and its compounds as Al	900
Aluminium and its compounds as Al[1]	375
Iron and its compounds as Fe	4500
Iron and its compounds as Fe[1]	1500
Arsenic and its compounds expressed as As	125
Arsenic and its compounds expressed as As[1,]	100
Total Ammoniacal N	11000
Phosphate as P	15250

TABLE 2.2.5	
Release Point	**W1**
Substance	**Maximum concentration** [Note 3] **µg/l (except where otherwise specified)**
Suspended solids	45 mg/l
Suspended solids up until 31/12/2007	30mg/l (80%) of all measured values of flow proportional samples taken over 1 year.
Suspended solids after 01/01/2008	30mg/l (95%) of all measured values of flow proportional samples taken over 1 year.
pH range	6.0-9.5
Temperature	35 °C
Flow rate	60 m^3/hour and 4750 m^3/week
Total Cyanide as CN	350
Total Cyanide as CN[1]	30
Total Phenols[2]	10
Fluoride	2500mg/l
Chemical Oxygen Demand	160 mg/l
BOD	60 mg/l
Oil Content	7
Turbidity	Limit agreed by virtue of improvement condition 12

Note 1: These limits shall be achieved after 31st December 2007
Note 2: Definition of phenol to be agreed in writing with the Agency
Note 3: The emission limit values refer to the monthly composite sample concentration unless otherwise specified.

TABLE 2.2.5 a	
Release Point **W1**	
Substance	**Maximum Concentration** [Note 3] **µg/l unless otherwise specified**
1,2-Dichloroethane	5
Aldrin	0.01
Atrazine	0.06
Azinphos-methyl	0.01
Dichlorvos	0.2
Dieldrin	0.01
Endosulfan	0.03
Endrin	0.005
Fenitrothion	0.08
Hexachlorobenzene	0.03
Hexachlorobutadiene	0.06

TABLE 2.2.5 a

Release Point **W1**	
Substance	**Maximum Concentration** Note 3 **µg/l unless otherwise specified**
Hexachlorocyclohexane (All isomers)	0.02
Malathion	0.08
PCBs (Polychlorinated biphenyls)	0.7
Pentachlorophenol and its compounds	0.7
Simazine	0.06
DDT (All isomers)	0.025
Tribuyl tin and triphenyl tin taken together	0.04
Tribuyl tin and triphenyl tin taken together[1]	0.002
Trichlorobenzene (All isomers)	0.2
Trifluralin	0.1
Azinphos-ethyl	0.01
Carbon tetrachloride	12
Chloroform	12
Tetrachloroethylene	10
Isodrin	0.005
1,1,1 trichloroethane	40
Trichloroethylene	10
Dioxins and Dibenzofurans expressed as I-TEQ	0.14 ng/l
Dioxins / furans (WHO-TEQ Humans / Mammals) [2]	
Dioxins / furans (WHO-TEQ Fish)[2]	
Dioxins / furans (WHO-TEQ Birds) [2]	

Note 1: These limits shall be achieved after 31st December 2007
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: The emission limit values refer to the monthly composite sample concentration unless otherwise specified.

2.2.2.6 Emissions to water shall be monitored by the methods specified in Table 2.2.6 unless otherwise agreed in writing. Where a parameter specified in either Table 2.2.5 or 2.2.5a is not included in Table 2.2.6 the monitoring method shall be agreed in writing with the Agency within three months of the date of issue of this permit with the exception of suspended solids.

Table 2.2.6

Parameter	**Monitoring Type/ Frequency**	**Method Specification Ref**
pH	Continuous 24 hourly (for monthly composite)	BS 1647-2:1984

Table 2.2.6		
Parameter	**Monitoring Type/ Frequency**	**Method Specification Ref**
Temperature	Continuous 24 hourly (for monthly composite)	Traceable to a national standard p110 sector guidance note
Flow	Continuous 24 hourly (for monthly composite)	BS 3680 series
Total suspended solids (as defined by 91/271/EEC)[1]	24 hourly (for monthly composite)	BS EN 872:1996
Mercury and its compounds, expressed as mercury (Hg)	24 hourly (for monthly composite)	BS EN 13506:2002
Cadmium and its compounds, expressed as cadmium (Cd)	24 hourly (for monthly composite)	BS 6068-2.89
Thallium and its compounds, expressed as thallium (Tl)	24 hourly (for monthly composite)	BS 6068-2.89
Arsenic and its compounds, expressed as arsenic (As)	24 hourly (for monthly composite)	BS 6068-2.60
Lead and its compounds, expressed as lead (Pb)	24 hourly (for monthly composite)	BS 6068-2.60
Chromium and its compounds, expressed as chromium (Cr)	24 hourly (for monthly composite)	BS 6068-2.60
Copper and its compounds, expressed as copper (Cu)	24 hourly (for monthly composite)	BS 6068-2.60
Nickel and its compounds, expressed as nickel (Ni)	24 hourly (for monthly composite)	BS 6068-2.60
Zinc and its compounds, expressed as zinc (Zn)	24 hourly (for monthly composite)	BS 6068-2.60

Note 1: Total suspended solids limits apply as 24hr flow proportional samples until 1st January 2008 with 80% of values <30 mg/l and 100% < 45mg/l and after this date 95% of values <30 mg/l and 100% < 45 mg/l

2.2.2.7 The annual volume of water discharged to controlled waters shall not exceed 225,000 m^3.

2.2.2.8 No condition applies

2.2.2.9 No condition applies

2.2.2.10 Discharges into controlled waters at Release Point W1 shall only consist of:

a Trade effluent derived from the incineration of wastes authorised in condition 2.1.3 and schedule 6 of this permit.

b Sewage effluent from the effluent treatment plant serving the land and premises, which are the subject of this permit.

c Surface water from the land and premises, which are the subject of this permit, subject to the conditions specified in Conditions 2.2.2.10 and 2.2.2.11.

2.2.2.11 The following conditions apply prior to discharging effluent to controlled waters:

2.2.2.11.1 Prior to discharge of a batch treated effluent tank to controlled waters, the tank contents shall be sampled.

2.2.2.11.2 The sample shall be analysed for the substances specified in Table 2.2.5 before discharge.

2.2.2.11.3 2.2.2.11.3 The monthly composite sample shall be analysed for total cyanides as CN, Total Phenols, Fluoride, Chemical Oxygen Demand and Oil Content. A spot sample shall be analysed for BOD once per month.

2.2.2.11.4 2.2.11.4 The analytical results of every sample, the batch tank reference number and the date each sample was taken shall be recorded in a log and shall, on request, be made available to the Environment Agency.

2.2.2.12 Surface run off water defined as contaminated as shown in Drawing PD5/000/4237 shall not be discharged to controlled waters.

2.2.2.13 Surface run off water defined as suspect as shown in Drawing PD5/000/4237 shall only be discharged to controlled waters after an assessment, which should include analysis, confirms that none of the determinands are present at a concentration which would exceed the limits specified in Tables 2.2.5 and 2.2.5a.

2.2.2.14 Recovered low grade water from surface run off water defined as contaminated as shown in Drawing PD5/000/4237 or from aqueous waste received shall not be discharged to controlled waters.

Emissions to sewer

2.2.2.15 No emission from the Permitted Installation shall be made to sewer.

2.2.3 Emissions to groundwater

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

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

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

2.2.4 Fugitive emissions of substances to air

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

- storage areas

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

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

2.2.5 Fugitive emissions of substances to water and sewer

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

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

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

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

2.2.6 Odour

2.2.6.1 Subject to Condition 2.2.6.4 of this Permit, the Operator shall use BAT so as to prevent or where that is not practicable to reduce odorous emissions from the Permitted Installation, in particular by:

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

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

2.2.6.2 The opening of drums containing potentially odorous wastes for examination shall only be carried out in an area, which is provided with exhaust ventilation routed to the incinerator.

2.2.6.3 All emissions to air from the Installation shall be free from offensive odour as perceived by an Authorised Officer of the Agency outside of the Installation boundary except that the Operator shall not be taken to have breached this condition if the Operator has used BAT to prevent, or where that is not practicable, to reduce, such odorous emissions.

2.2.6.4 All practicable measures shall be taken to minimise the presence of offensive odours outside the Operator's premises. Such measures shall include related matters covered in this section of the permit together with the following:-

a The Operator shall have appropriate procedures in place that shall be implemented and maintained which check that all bulk liquid waste road tankers and packaged and drummed waste delivered to site are in a sound condition and substantially free from external contamination. Wastes in containers or tankers, which fail to meet this criterion, shall either be returned to the customer or corrective action shall be taken to prevent recurrence of the incident;

b Refusal by the Operator to accept bulk liquid wastes to site which are known to cause offensive odours outside the Operator's premises or which the Operator could reasonably have been expected to have known were likely to cause offensive odours outside the Operator's premises unless the Operator has reached prior agreement with the Agency, in writing, that such bulk liquid wastes can be received on site;

c The regular washing down and cleaning of tank bunds;

d Routine and regular inspection of liquid waste transfer equipment and prompt remedial attention to any detected leak from any pump, gland or liquid waste transfer line;

e The presence, proper use and maintenance of an extraction scheme installed to avoid the escape of odorous vapours from any on-site bulk liquid waste storage tank, during transfer of road tanker contents to any of the on-site bulk liquid waste storage tanks and the macerator and of any associated extraction scheme;

f Adoption of procedures previously agreed in writing with the Environment Agency, for the desludging or cleaning of any tank previously used to hold liquid waste;

g As far as reasonably practicable the combustion chambers, casings, ductwork and associated equipment shall be made and maintained so as to prevent leakage of combustion gases and ingress of air at all times;

h The containment facilities on the deslagger system shall be maintained and operated so as to minimise the emission of dust;

i The delivery, handling, transport and storage of odorous or corrosive liquids associated with the process shall be carried out in such a manner that releases to atmosphere are minimised.

Any spillage or deposits of finely divided particulate matter shall be cleaned as soon as possible, in a manner that minimises releases to air.

2.2.7 Emissions to Land

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

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

2.2.8 Other technical measures

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

Table 2.2.11: Equivalent parameters and technical measures

Parameter or measure	Requirement or description of measure, and frequency if relevant
Sulphur content of fuel	Monthly rolling average sulphur content of fuel burned shall not exceed 0.05% by weight
Incinerator slag burn-	The Permitted Installation shall be operated to ensure that the

out quality	incinerator slag shall have a total organic carbon (TOC) content less than 3%, or a loss on ignition of less than 5% of the dry weight of the slag

2.3 Management

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

Training

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

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

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

Maintenance

2.3.5 All plant and equipment used in operating the Permitted Installation, the failure of which could lead to an adverse impact on the environment, shall be maintained in good operating condition.

2.3.6 The Operator shall maintain a record of relevant plant and equipment covered by condition 2.3.5 and for such plant and equipment:

2.3.6.1 a written or electronic maintenance programme; and

2.3.6.2 records of its maintenance.

Incidents and Complaints

2.3.7 The Operator shall maintain and implement written procedures for:

2.3.7.1 taking prompt remedial action, investigating and reporting actual or potential non-compliance with operating procedures or emission limits; and

2.3.7.2 investigating incidents, (including any malfunction, breakdown or failure of plant, equipment or techniques, down time, any short term and long term remedial measures and near misses) and prompt implementation of appropriate actions; and

2.3.7.3 ensuring that detailed records are made of all such actions and investigations.

2.3.8 The Operator shall record and investigate complaints concerning the Permitted Installation's effects or alleged effects on the environment. The record shall give the date and nature of complaint, time of complaint, name of complainant (if given), a summary of any investigation and the results of such investigation and any actions taken.

2.4 Efficient use of raw materials

2.4.1 The Operator shall -

2.4.1.1 maintain the raw materials table or description submitted in response to Section 2.4 of the Application and in particular consider on a periodic basis whether there are suitable alternative materials to reduce environmental impact;

2.4.1.2 carry out periodic waste minimisation audits and water use efficiency audits. If such an audit has not been carried out in the 2 years prior to the issue of this Permit, then the first such audit shall take place within 2 years of its issue. The methodology used and an action plan for increasing the efficiency of the use of raw materials or water shall be submitted to the Agency within 2 months of completion of each such audit and a review of the audit and a description of progress made against the action plan shall be submitted to the Agency at least every 4 years thereafter; and

2.4.1.3 ensure that incoming water use is directly measured and recorded.

2.4.2 Water Recovery Plant

a Only those waste types described and meeting the suitability criteria given in the Trial Report Water Recovery Project (dated September 27th 2004) shall be treated in the Water Recovery Plant.

b Other waste types may only be treated with the written agreement of the Environment Agency.

The Operator shall maintain a record of the quantity of each waste type processed, the quantities of low grade water, organic material and solids separated and the eventual fate of these components.

2.5 Waste Storage and Handling

2.5.1 The Operator shall design, maintain and operate all facilities for the storage and handling of waste on the Permitted Installation such that there are no releases to water or land during normal operation and that emissions to air and the risk of accidental release to water or land are minimised.

2.5.2 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of litter from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.5.3 Any vehicle delivering waste to the site that does not meet the description given in the transfer note or cannot otherwise be accepted, shall be rejected. Wastes which have to be rejected shall be identified and provision made for holding the waste on site in a secured position and in a way that avoids the incorporation of the waste with wastes to be processed by the Operator pending the removal of such unacceptable waste deliveries. The Agency, at the reporting address, shall be informed of all unacceptable deliveries. A record of the following information, shall be kept of such deliveries:-

a The reason why the consignment is unacceptable;

b The date and time that the Agency was informed; and

c The vehicle registration number, driver's name (if given), the name of the carrier, the nature and origin of the waste and the next destination of the waste consignment.

2.5.4 Precautions shall be taken to ensure that no waste from the process is carried out of the site on the wheels of vehicles

2.5.5 No waste shall be accepted at the appropriate waste storage area unless there is sufficient storage space within the hardstanding storage area, liquid storage tanks, covered building dedicated to the storage of wastes, stores for radioactive wastes or toxic materials which have to be specially segregated.

2.6 Waste recovery or disposal

2.6.1 Waste produced at the Permitted Installation shall be:

2.6.1.1 recovered to no lesser extent than described in the Application; and

2.6.1.2 where not recovered, disposed of while avoiding or reducing any impacts on the environment provided always that this is not done in any way that would have a greater effect on the environment than that described in the Application.

2.6.2 The Operator shall maintain the waste recovery or disposal table or description submitted in response to Section 2.6 of the Application and in particular review the available options for waste recovery and disposal for the purposes of complying with condition 2.6.1 above.

2.6.3 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin, destination (including whether this is a recovery or disposal operation) and where relevant removal date of any waste that is produced at the Permitted Installation.

2.6.4 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin and delivery date of any waste that is received for disposal or recovery at the Permitted Installation.

2.6.5 No condition applies.

2.6.6 Wastes produced at the Permitted Installation shall, as a minimum, be sampled and analysed in accordance with Table 2.6.1. Additional samples shall be taken and tested and appropriate action taken, whenever:

- disposal or recovery routes change; or
- it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

Table 2.6.1 : Emission limits and monitoring frequency for solid residues

Emission point reference	Substance	Limit (including Reference Period)	Monitoring frequency	Monitoring method
Incinerator Slag	TOC or LOI	3% *for TOC* 5% *for LOI*	Monthly	Agency ash sampling protocol.

2.6.7 Prior to accepting waste on site, the Operator shall have available a description of the waste covering:

a its physical and as far as practicable, the chemical composition of the waste and all information necessary to evaluate its suitability for the intended incineration process;

b its hazard characteristics; the hazard characteristic of substances with which it cannot be mixed; and the precautions to be taken in handling the waste.

The Operator shall have procedures in place which confirm this information by; checking that the quantity is as declared by the consignor; checking the consignment notes and any locally agreed consignment information documentation; where appropriate, taking representative samples as far as possible before unloading to verify conformity with the description provided and enable the inspector to identify the nature of the wastes treated.

2.6.8 The total number of drums of waste on the site shall not exceed 20,000 or 3500 tonnes in weight.

2.6.9 Waste caustic streams used as a feedstock for the gas cleaning quench vessel shall be subject to written agreement by the Agency and on any additional monitoring requirements.

2.7 Energy Efficiency

2.7.1 The Operator shall produce a report on the energy consumed at the Permitted Installation over the previous calendar year, by 31 January each year, providing the information required by condition 4.1.2.

2.7.2 The Operator shall maintain and update annually an energy management system which shall include, in particular, the monitoring of energy flows and targeting of areas for improving energy efficiency.

2.7.3 The Operator shall design, maintain and operate the Permitted Installation so as to secure energy efficiency, taking into account relevant guidance including the Agency's Energy Efficiency Horizontal Guidance Note as from time to time amended. Energy efficiency shall be secured in particular by:

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

2.8 Accident prevention and control

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

2.9 Noise and Vibration

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

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

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

2.10 On-site Monitoring

2.10.1 The Operator shall maintain and implement an emissions monitoring programme which ensures that emissions are monitored from the specified points, for the parameters listed in and to the frequencies and methods described in Tables 2.2.2 and 2.2.2a, 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 2.2.2 and 2.2.2a the Operator shall perform a QAL2 test as specified in BS EN 14181 at least every three years and when there are significant changes to either the process, the fuel used or to the CEMs themselves.

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

2.10.3.1 The functioning of the automated monitoring equipment for emissions to water in table 2.2.6 shall be subject to an annual surveillance test. Calibration shall be done by means of parallel measurement with reference measures at least every three years.

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
Response to question 43 of Schedule 4 Notice dated 14/11/05	Wind speed and direction	Continuous	As described in the Application	
Sampling Point A1	Temperature of flue gas	Continuous	As described in the Application	
Sampling Point A1	pressure	Continuous	As described in the Application	
Sampling Point A1	oxygen content	Continuous	As described in the Application	
Sampling Point A1	Dioxin-like PCBs (WHO-TEQ [1] Humans / Mammals)	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours.	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)	
Sampling Point A1	Dioxin-like PCBs (WHO-TEQ [1] Fish)	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours.	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)	
Sampling Point A1	Dioxin-like PCBs (WHO-TEQ [1] Birds)	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours.	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)	
Sampling Point A1	Specific individual poly-cyclic aromatic	Bi-annual periodic measurement,	Procedure shall use BS ISO 11338-1	

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
	hydrocarbons (PAHs), as specified in condition 6.1.1	average value over sample period of between 6 and 8 hours.	and BS-ISO 11338-2.	
Sampling Point A1	Dioxins / furans (WHO-TEQ Humans / Mammals) [1]	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours.	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)	
Sampling Point A1	Dioxins / furans (WHO-TEQ Fish) [1]	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours.	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)	
Sampling Point A1	Dioxins / furans (WHO-TEQ Birds) [1]	Bi-annual periodic measurement, average value over sample period of between 6 and 8 hours.	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)	
Incinerator Slag	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans	Quarterly	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
	and dioxin-like PCBs.			
Incinerator Slag	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	Before use of a new disposal or recycling route	Sampling and analysis as per Agency ash sampling protocol.	
Filter Cake residues	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs and Loss on Ignition.	Quarterly	Sampling and analysis as per Agency ash sampling protocol.	
Filter Cake residues	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc)	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
	soluble fractions			
Other solid residues Furnace brick work - contaminated by combustion products	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	Before disposal	Sampling and analysis as per Agency ash sampling protocol.	
Other solid residues Furnace brick work - contaminated by combustion products	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	Before use of a new disposal or recycling route	Sampling and analysis as per Agency ash sampling protocol.	
Close to the Combustion Chamber inner wall in the locations detailed in Application	Temperature (° C)	Continuous	Traceable to National Standards	
W1	Dioxins / furans (WHO-TEQ Humans / Mammals) [1]	Bi-annual periodic measurement 24-hour flow proportional sample or spot sample	To be determined utilising sampling and analytical techniques developed for dioxins/ furans	

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
			(BS EN 1948)	
W1	Dioxins / furans (WHO-TEQ Fish) [1]	Bi-annual periodic measurement 24-hour flow proportional sample or spot sample	To be determined utilising sampling and analytical techniques developed for dioxins/ furans (BS EN 1948)	
W1	Dioxins / furans (WHO-TEQ Birds) [1]	Bi-annual periodic measurement 24-hour flow proportional sample or spot sample	To be determined utilising sampling and analytical techniques developed for dioxins/ furans (BS EN 1948)	
W1	Dioxins and Furans (I-TEQ)	Bi-annual periodic measurement 24-hour flow proportional sample or spot sample	USEPA Method 1613	

Note 1: The TEQ sum of the equivalence factors to be reported as a range based on: All congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum.

2.10.5 The Operator shall carry out monitoring of the process variables listed in Table 2.10.1 to the frequencies and methods described in that Table.

2.10.6 No condition applies

2.10.7 The Operator shall notify the Agency at least 14 days in advance of undertaking monitoring and/ or spot sampling, where such notification has been requested in writing by the Agency.

2.10.8 The Operator shall maintain records of all monitoring taken or carried out (this includes records of the taking and analysis of samples instrument measurements (periodic and continual), calibrations, examinations, tests and surveys) and any assessment or evaluation made on the basis of such data.

2.10.9 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme in conditions 2.2.2.6 and 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 2.2.2. The CEM shall also be able to measure instantaneous values over the ranges which are to be expected during all operating conditions. If it is necessary to use more than one range setting of the CEM to achieve this requirement, the CEM shall be verified for monitoring supplementary, higher ranges.

2.10.10 There shall be provided:

2.10.10.1 safe and permanent means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 2 to this Permit, unless otherwise specified in that Schedule; and

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

2.10.11 The Operator shall carry out the on-going monitoring identified in the Site Protection and Monitoring Programme submitted under condition 4.1.8, unless otherwise agreed in writing by the Agency.

2.10.12 The Operator shall, within 6 months of the issue of this Permit, in accordance with and using the format given in the Land Protection Guidance:

2.10.12.1 collect the site reference data identified in the Site Protection and Monitoring Programme submitted under condition 4.1.8, and

2.10.12.2 report that site reference data to the Agency,

unless otherwise agreed in writing by the Agency.

2.11 Closure and Decommissioning

2.11.1 The Operator shall maintain and operate the Permitted Installation so as to prevent or minimise any pollution risk, including the generation of waste, on closure and decommissioning in particular by:-

2.11.1.1 attention to the design of new plant or equipment;

2.11.1.2 the maintenance of a record of any events which have, or might have, impacted on the condition of the site along with any further investigation or remediation work carried out; and

2.11.1.3 the maintenance of a site closure plan to demonstrate that the Installation can be decommissioned avoiding any pollution risk and returning the site of operation to a satisfactory state.

2.11.2 Notwithstanding condition 2.11.1 of this Permit, the Operator shall carry out a full review of the Site Closure Plan at least every 4 years.

2.11.3 The site closure plan shall be implemented on final cessation or decommissioning of the Permitted activities or part thereof.

2.11.4 The Operator shall give at least 30 days written notice to the Agency before implementing the site closure plan.

2.12 Multiple Operator installations

2.12.1 This is not a multi-Operator installation

2.13 Transfer to effluent treatment plant

2.13.1 Transfers to effluent treatment plant(s) shall occur only from the point(s) specified in Table 2.13.1 and transfers from those points shall arise only from the source(s) and shall be released only to the treatment plant(s) specified in that Table.

Table 2.13.1 Transfer point(s) to effluent treatment plant

Transfer point description or identifier	Source	Effluent Treatment Plant
E1	Effluent from the sumps of the Quench Tower, packed tower absorber, and the electrostatic precipitators (page 6 of ASR) and transfer from the MBM and cooling plant	Effluent treatment area marked on plan ASR4

2.13.2 No condition applies.

3 Records

3.1 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the Permitted Installation shall:-

3.1.1 be made available for inspection by the Agency at any reasonable time;

3.1.2 be supplied to the Agency on demand and without charge;

3.1.3 be legible;

3.1.4 be made as soon as reasonably practicable;

3.1.5 indicate any amendments which have been made and shall include the original record wherever possible;

3.1.6 be retained at the Permitted Installation, or other location agreed by the Agency in writing, for a minimum period of 4 years from the date when the records were made, unless otherwise agreed in writing; and

3.1.7 where they concern the condition of the site of the Installation or are related to the implementation of the Site Protection and Monitoring Programme, be kept at the Permitted Installation, or other location agreed by the Agency in writing, until all parts of the Permit have been surrendered.

4 Reporting

4.1.1 All reports and written and or oral notifications required by this Permit and notifications required by Regulation 16 of the PPC Regulations shall be made or sent to the Agency using the contact details notified in writing to the Operator by the Agency.

4.1.2 The Operator shall, unless otherwise agreed in writing, submit reports of the monitoring and assessment carried out in accordance with the conditions of this Permit, as follows:-

4.1.2.1 in respect of the parameters and emission points specified in Table S2 to Schedule 2;

4.1.2.2 for the reporting periods specified in Table S2 to Schedule 2 and using the forms specified in Table S3 to Schedule 3;

4.1.2.3 giving the information from such results and assessments as may be required by the forms specified in those Tables; and

4.1.2.4 to the Agency within 28 days of the end of the reporting period.

4.1.3 The Operator shall submit to the Agency a report on the performance of the Permitted Installation over the previous year, by 31 January each year, providing the information listed in Tables S4.1 and S4.2 of Schedule 4, assessed at any frequency specified therein, and using the form specified in Table S3 to Schedule 3.

4.1.4 The Operator shall submit an annual performance report on the functioning and monitoring of the incineration plant in a format agreed with the Environment Agency by the 31st January each year. The report shall, as a minimum requirement, give an account of the running of the process and the emissions into air and water compared with the emission standards in the Waste Incineration Directive, as required by Article 12(2) of the Waste Incineration Directive. The first report shall be submitted by the 31st January 2007.

4.1.5 The Operator shall review fugitive emissions, having regard to the application of Best Available Techniques, on an annual basis, or such other period as shall be agreed in writing by the Agency, and a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to reduce them within 3 months of the end of such period.

4.1.6 Where the Operator has a formal environmental management system applying to the Permitted Installation which encompasses annual improvement targets the Operator shall, not later than 31 January in each year, provide a summary report of the previous year’s progress against such targets.

4.1.7 The Operator shall, within 6 months of receipt of written notice from the Agency, submit to the Agency a report assessing whether all appropriate preventive measures continue to be taken against pollution, in particular through the application of the best available techniques, at the Installation. The report shall consider any relevant published technical guidance current at the time of the notice which is either supplied with or referred to in the notice, and shall assess the costs and benefits of applying techniques described in that guidance, or otherwise identified by the Operator, that may provide environmental improvement.

4.1.8 The Operator shall, within two months of the date of this Permit, submit a detailed Site Protection and Monitoring Programme, in accordance with and using the appropriate template format given in the Land Protection Guidance. The Operator shall implement and maintain the Site Protection and Monitoring Programme (SPMP) submitted under this condition, and shall carry out regular reviews of it at a minimum frequency of every 2 years. The results of such reviews and any changes made to the SPMP shall be reported to the Agency within 1 month of the review or change.

5 Notifications

5.1.1 The Operator shall notify the Agency **without delay** of:-

5.1.1.1 the detection of an emission of any substance which exceeds any limit or criterion in this Permit specified in relation to the substance;

5.1.1.2 the detection of any fugitive emission which has caused, is causing or may cause significant pollution;

5.1.1.3 the detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or has the potential to cause significant pollution;

5.1.1.4 any accident which has caused, is causing or has the potential to cause significant pollution; and

5.1.1.5 any incident which has led to a period of abnormal operation of incineration or co-incineration plant, as defined in section 6.1.1.

5.1.2 The Operator shall submit written confirmation to the Agency of any notification under condition 5.1.1, by sending:-

5.1.2.1 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 or to that in the Site Protection and Monitoring Programme submitted under condition 4.1.8 of this Permit.

5.1.5 The Operator shall notify the following matters to the Agency in writing within 14 days of their occurrence:-

5.1.5.1 where the Operator is a registered company:-

- any change in the Operator's trading name, registered name or registered office address;
- any change to particulars of the Operator's ultimate holding company (including details of an ultimate holding company where an Operator has become a subsidiary)
- any steps taken with a view to the Operator going into administration, entering into a company voluntary arrangement or being wound up;

5.1.5.2 where the Operator is a corporate body other than a registered company:

- any change in the Operator's name or address;
- any steps taken with a view to the dissolution of the Operator.

5.1.5.3 In any other case: -

- the death of any of the named Operators (where the Operator consists of more than one named individual);
- any change in the Operator's name(s) or address(es);
- any steps taken with a view to the Operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case them being in a partnership, dissolving the partnership;

5.1.6 Where the Operator has entered into a Climate Change Agreement with the Government, the Operator shall notify the Agency within one month of:-

5.1.6.1 a decision by the Secretary of State not to re-certify that Agreement.

5.1.6.2 a decision by either the Operator or the Secretary of State to terminate that agreement.

5.1.6.3 any subsequent decision by the Secretary of State to re-certify such an Agreement.

5.1.7 Where the Operator has entered into a Direct Participant Agreement in the Emissions Trading Scheme which covers emissions relating to the energy consumption of the activities, the Operator shall notify the Agency within one month of:-

5.1.7.1 a decision by the Operator to withdraw from or the Secretary of State to terminate that agreement.

5.1.7.2 a failure to comply with an annual target under that Agreement at the end of the trading compliance period.

5.1.8 The Environment Agency shall be notified, in writing, at the end of each quarter of the nature and quantity of any waste stored on site for a period of greater than 6 months.

6 Interpretation

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

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

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

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

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

“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, any power specified in Section 108(4) of that Act.

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

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

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

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

“BOD” means “Biochemical Oxygen Demand”, which means biochemical oxygen demand measured after 5 days at 20°C with nitrification suppressed by the addition of allyl-thiourea.”

“CEM” Continuous emission monitor

“CEN” means Commité Européen de Normalisation

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

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

"*Daily average*" for releases of substances to air means the average of 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.

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

"*ELV*" means emission limit value.

"Incinerator Slag" means the waste deposited from the bottom of the furnace by chain link conveyor as described in section B2.5.1 of the Application.

"*Filter Cake*" means waste from the gas/ water treatment as described in section B2.5.1 of the Application.

"Flow rate" with respect to conditions 2.2.2.4 and 2.2.2.7 means dry weather flows.

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

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

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

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

"ISO" means International Standards Organisation.

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

"LAeq,T" means the equivalent continuous A-weighted sound pressure level in dB determined over time period, T.

"LA90, T" means the A-weighted sound pressure level in dB exceeded for 90% of the time period, T.

"LAFmax" means the maximum A weighted sound level measurement in dB measured with a fast time weighting.

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

"*MCERTS"* means the Environment Agency's Monitoring Certification Scheme.

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

" Monthly composite sample" means for the purpose of condition 2.2.2 and Table 2.2.6 a sample taken over a period of a calendar month.

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

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

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

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

"PM_{10}, $PM_{2.5}$, $PM_{1.0}$," mean respectively those particulates which have mean particle diameters of 10, 2.5 and 1.0 microns (µm)

"Prohibited Carcinogen " means substances listed under Schedule 2 of the Control Of Substances Hazardous to Health Regulations 1981.

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

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

"*Shutdown*" is any period where the plant is being returned to a non-operational state and there is no waste being burned.

*"*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 to initiate steady-state conditions.*

"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 incinerator slag, this means the total carbon content of all organic species present in the slag (excluding carbon in elemental form).

"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

"Year" means calendar year ending 31 December.

6.1.2 Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

6.1.3 Unless otherwise stated, any references in this Permit to concentrations of substances in emissions into air means:-

6.1.3.1 in relation to gases from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels (including waste oil), 6% dry for solid fuels; and/or

6.1.3.2 in relation to gases from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

6.1.3.3 In relation to gases from incineration plants other than those burning waste oil, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry.

6.1.3.4 Where hazardous wastes are burned in an incineration or co-incineration plant and the emissions of pollutants are reduced by gas treatment, standardisation of the gas with respect to oxygen content shall be carried out only if the oxygen concentration measured over the same period exceeds the relevant oxygen content defined in conditions 6.1.3.1 – 6.1.3.3 above. In other cases, the measured emissions shall be standardised only for moisture, pressure and temperature.

6.1.4 Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the wording of the document(s) with the most recent date shall prevail to the extent of such conflict.

6.1.5 For dioxins/furans and dioxin-like PCBs the determination of the toxic equivalence concentration (I-TEQ, & WHO-TEQ for dioxins/furans, WHO-TEQ for dioxin-like PCBs) stated as a release limit and/ or reporting requirement, the mass concentrations of the following congeners have to be multiplied with their respective toxic equivalence factors before summing.

TEF schemes for dioxins and furans				
Congener	***I-TEF(1990)***	***WHO-TEF (1997/8)***		
		Humans / Mammals	***Fish***	***Birds***
Dioxins				
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	-	-
Furans				

TEF schemes for dioxins and furans				
Congener	***I-TEF(1990)***	***WHO-TEF (1997/8)***		
		Humans / Mammals	***Fish***	***Birds***
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-HxCDF	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)***		
	Humans / mammals	***Fish***	***Birds***
Non-ortho PCBs			
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
Mono-ortho PCBs			
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

Schedule 1 - Notification of abnormal emissions (Including abnormal operations)

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

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

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

Part A

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

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

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

Part B

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

Part C

Permit Number	
Name of Operator	
Location of Installation	

For multi-line plants, indicate which line(s) was (were) subject to abnormal operation.	
Time at which abnormal operation commenced	
Time at which abnormal operation ceased	
Duration of this incidence of abnormal operation	
Cumulative abnormal operation duration in current year (at end of present incidence)	
Reasons for abnormal operation	
How did the abnormal operation end? (e.g. plant repaired, reaching maximum permitted duration, initiation of shutdown, etc.)	
Where the abnormal operation was caused by the failure of the particulate, CO or TOC CEM, attach a copy of the alternate monitoring data which was used to demonstrate compliance with the abnormal operation emission limit values.	

Where abatement plant has failed, give the half-hourly average emissions for pollutants of relevance during the abnormal operation in the rows below

Pollutant	**1st ½ hour**	**2nd ½ hour**	**3rd ½ hour**	**4th ½ hour**	**5th ½ hour**	**6th ½ hour**	**7th ½ hour**	**8th ½ hour**

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of Operator

Schedule 2 - Reporting of monitoring data

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

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins
Sulphur dioxide mg m^{-3}	A1	Every 6 months (periodic) Every month (continuous)	01/01/2006
Total Organic Carbon (TOC) mg m^{-3}	A1	Every 6 months (periodic) Every month (continuous)	01/01/2006
Oxides of nitrogen mg m^{-3}	A1	Every 6 months (periodic) Every month (continuous)	01/01/2006
Gaseous chlorides as HCl mg m^{-3}	A1	Every 6 months (periodic) Every month (continuous)	01/01/2006
Gaseous fluorides as HF mg m^{-3}	A1	Every 6 months	01/01/2006
Particulate Matter mg m^{-3}	A1	Every 6 months (periodic) Every month (continuous)	01/01/2006
Carbon Monoxide mg m^{-3}	A1	Every 6 months (periodic) Every month (continuous)	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	01/01/2006

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins
		months.	
Dioxins / furans(WHO-TEQ Humans / Mammals)	A1	Every 6 months.	01/01/2006
Dioxins / furans (WHO-TEQ Fish)	A1	Every 6 months.	01/01/2006
Dioxins / 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
Cadmium and its compounds as Cd	W1	Every 3 months	01/01/2006
Mercury and its compounds as Hg	W1	Every 3 months	01/01/2006
Chromium and its compounds as Cr	W1	Every 3 months	01/01/2006
Copper and its compounds as Cu	W1	Every 3 months	01/01/2006
Nickel and its compounds as Ni	W1	Every 3 months	01/01/2006
Lead and its compounds as Pb	W1	Every 3 months	01/01/2006
Zinc and its compounds as Zn	W1	Every 3 months	01/01/2006
Aluminium and its compounds as Al	W1	Every 3 months	01/01/2006
Iron and its compounds as Fe	W1	Every 3 months	01/01/2006
Arsenic and its compounds expressed as As	W1	Every 3 months	01/01/2006
Thallium and its compounds expressed as Tl	W1	Every 3 months	01/01/2006
Cadmium and thallium and their compounds, expressed as their respective elements taken together	W1	Every 3 months	01/01/2006
Antimony, arsenic, lead, chromium, cobalt, copper, manganese, nickel, vanadium, tin and their compounds expressed as their respective elements taken together.	W1	Every 3 months	01/01/2006
Total Ammoniacal N	W1	Every 3 months	01/01/2006
Phosphate as P	W1	Every 3 months	01/01/2006
pH range	W1	Every 3 months	01/01/2006

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins
Temperature	W1	Every 3 months	01/01/2006
Flow rate	W1	Every 3 months	01/01/2006
Total Cyanide as CN	W1	Every 3 months	01/01/2006
Total Phenols	W1	Every 3 months	01/01/2006
Fluoride	W1	Every 3 months	01/01/2006
Chemical Oxygen Demand	W1	Every 3 months	01/01/2006
BOD	W1	Every 3 months	01/01/2006
Oil Content	W1	Every 3 months	01/01/2006
Suspended solids	W1	Every 3 months	01/04/2006
1,2-Dichloroethane	W1	Every 3 months	01/01/2006
Aldrin	W1	Every 6 months	01/01/2006
Atrazine	W1	Every 6 months	01/01/2006
Azinphos-methyl	W1	Every 6 months	01/01/2006
Dichlorvos	W1	Every 6 months	01/01/2006
Dieldrin	W1	Every 6 months	01/01/2006
Endosulfan	W1	Every 6 months	01/01/2006
Endrin	W1	Every 6 months	01/01/2006
Fenitrothion	W1	Every 6 months	01/01/2006
Hexachlorobenzene	W1	Every 6 months	01/01/2006
Hexachlorobutadiene	W1	Every 6 months	01/01/2006
Hexachlorocyclohexane (All isomers)	W1	Every 6 months.	01/01/2006
Malathion	W1	Every 6 months.	01/01/2006
PCBs (Polychlorinated biphenyls)	W1	Every 6 months.	01/01/2006
Pentachlorophenol and its compounds	W1	Every 6 months.	01/01/2006
Simazine	W1	Every 6 months.	01/01/2006
DDT (All isomers)	W1	Every 6 months	01/01/2006
Tribuyl tin and triphenyl tin taken together	W1	Every 6 months	01/01/2006
Trichlorobenzene (All isomers)	W1	Every 6 months	01/01/2006
Trifluralin	W1	Every 6 months	01/01/2006
Azinphos-ethyl	W1	Every 6 months	01/01/2006
Carbon tetrachloride	W1	Every 6 months	01/01/2006
Chloroform	W1	Every 6 months	01/01/2006
Fenthion	W1	Every 6 months	01/01/2006

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins
Parathion	W1	Every 6 months	01/01/2006
Parathion-methyl	W1	Every 6 months	01/01/2006
Tetrachloroethylene	W1	Every 6 months.	01/01/2006
Isodrin	W1	Every 6 months.	01/01/2006
1,1,1 trichloroethane	W1	Every 6 months.	01/01/2006
Trichloroethylene	W1	Every 6 months.	01/01/2006
Dioxins and Dibenzofurans expressed as I-TEQ	W1	Every 6 months.	01/01/2006
Dioxins / furans (WHO-TEQ Humans / Mammals)	W1	Every 6 months.	01/01/2006
Dioxins / furans (WHO-TEQ Fish)	W1	Every 6 months.	01/01/2006
Dioxins / furans (WHO-TEQ Birds)	W1	Every 6 months.	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.	Incinerator slag	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	Incinerator slag	Before use of a new disposal or recycling route	01/01/2006
TOC	Incinerator slag	Monthly	01/01/2006
LOI (Alternative to TOC)	Incinerator slag	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.	Filter Cake	Every 6 months.	01/01/2006
Total soluble fraction and metals (Cadmium, Thallium, Mercury,	Filter Cake	Before use of a new disposal or	01/01/2006

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins
Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions		recycling route	
Metals (Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	Other solid residues Furnace brick work - contaminated by combustion products	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	Other solid residues Furnace brick work - contaminated by combustion products	Before use of a new disposal or recycling route	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
Performance Indicators	Installation	Every 12 months	01/01/2006

Schedule 3 - Forms to be used

Table S3: Reporting Forms		
Media or parameter	**Form Number**	**Date of Form**
Air: Periodic monitored emissions biannually	Agency Form /HP3835UZ/A1 /March 2007	March 2007
Air: Continuously monitored emissions of particulates	Agency Form /HP3835UZ/A2 /March 2007	March 2007
Air: Continuously monitored emissions of Hydrogen chloride	Agency Form /HP3835UZ/A3 /March 2007	March 2007
Air: Continuously monitored emissions of TOC	Agency Form /HP3835UZ/A4 /March 2007	March 2007
Air: Continuously monitored emissions of carbon monoxide	Agency Form /HP3835UZ/A6 /March 2007	March 2007
Air: Continuously monitored emissions of Sulphur dioxide	Agency Form /HP3835UZ/A7 /March 2007	March 2007
Air: Continuously monitored emissions of Oxides of nitrogen	Agency Form /HP3835UZ/A8 /March 2007	March 2007
Water: monitoring data	Agency Form /HP3835UZ/W1 /March 2007	March 2007
Water: monitoring data	Agency Form /HP3835UZ/W2 /March 2007	March 2007
Water: monitoring data	Agency Form /HP3835UZ/W3/March 2007	March 2007
Incinerator slag, Filter Cake Residues, Other solid residues: Composition	Agency Form /HP3835UZ/Ash1 /March 2007	March 2007
Incinerator slag, Filter Cake Residues, Other solid residues: Solubility	Agency Form /HP3835UZ/Ash2 /March 2007	March 2007
Energy	Agency Form /HP3835UZ/E1 /March 2007	March 2007
Waste Return	Agency Form /HP3835UZ/R1 /March 2007	March 2007
Water usage	Agency Form /HP3835UZ/WU1 /March 2007	March 2007
Performance indicators	Agency Form /HP3835UZ/PI1 /March 2007	March 2007

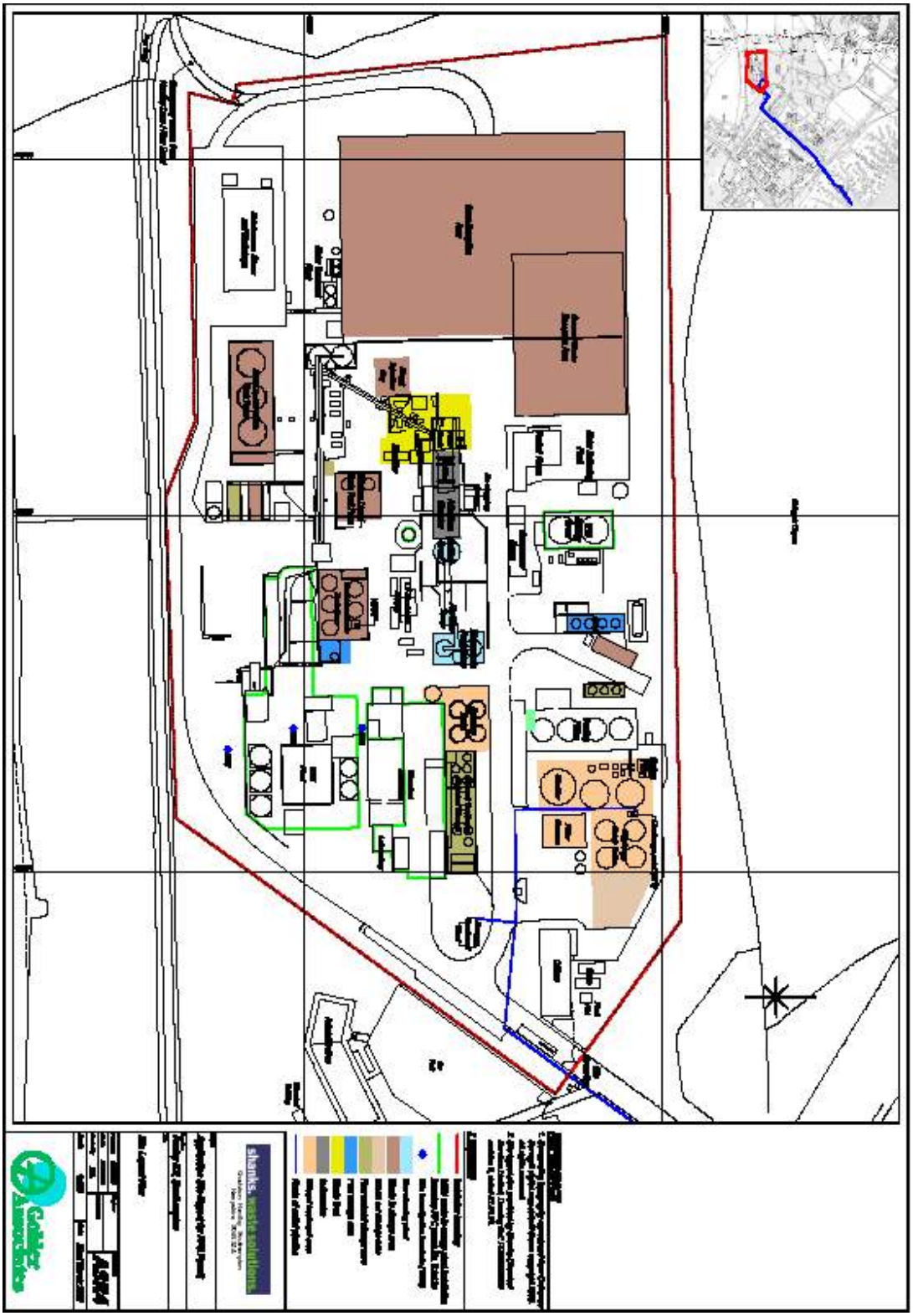
Schedule 4 - Reporting of performance data

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.

Table S4.1: Annual Production/Treatment	
Total Hazardous Waste Incinerated	tonnes
Total Non-Hazardous Waste Incinerated	tonnes
Electrical energy used on installation	KWhrs

Table S4.2: Performance parameters		
Parameter	**Frequency of assessment**	**Performance indicator**
Electrical energy Imported to site	Quarterly	KWhrs / tonne of waste incinerated
Fuel oil consumption	Quarterly	kg/ tonne of waste incinerated
Mass of Incinerator slag produced	Quarterly	kg/ tonne of waste incinerated
Mass of Filter Cake produced	Quarterly	kg/ tonne of waste incinerated
Mass of Other solid residues produced	Quarterly	kg/ tonne of waste incinerated
Lime consumption	Quarterly	kg/ tonne of waste incinerated
Caustic soda consumption	Quarterly	kg/ tonne of waste incinerated
Water consumption	Quarterly	m^3/ tonne of waste incinerated

Schedule 5 - Site Plan



Schedule 6 - List of Permitted Wastes

Permitted Waste Types

Description	European Waste Catalogue Number (where available) or other specification	Waste type as defined in Table 2.1.2
Wastes resulting from exploration, mining, quarrying, physical and chemical treatment of minerals	01 01, 01 03, 01 04, 01 05 as detailed Table TW1 of the application	Wastes resulting from exploration, mining, quarrying, physical and chemical treatment of minerals
Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing	02 01, 02 02, 02 03, 02 04, 02 05, 02 06, 02 07 as detailed Table TW1 of the application	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard	03 01, 03 02, 03 03, as detailed Table TW1 of the application	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
Wastes from the leather, fur and textile industries	04 01, 04 02 as detailed Table TW1 of the application	Wastes from the leather, fur and textile industries
Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal	05 01, 05 06, 05 07, as detailed Table TW1 of the application	Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal
Wastes from inorganic chemical processes	06 01, 06 02, 06 03, 06 04, 06 05, 06 06, 06 07, 06 08, 06 09, 06 10, 06 11, 06 13, as detailed Table TW1 of the application	Wastes from inorganic chemical processes
Wastes from organic chemical processes	07 01, 07 02, 07 03, 07 04, 07 05, 07 06, 07 07 as detailed Table TW1 of the application	Wastes from organic chemical processes
Wastes from the manufacture, formulation, supply and use of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks	08 01, 08 02, 08 03, 08 04, 08 05 as detailed Table TW1 of the application	Wastes from the manufacture, formulation, supply and use of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks
Wastes from the photographic industry	09 01 as detailed Table TW1 of the application	Wastes from the photographic industry
Wastes from thermal processes	10 01, 10 02, 10 03, 10 04, 10 05, 10 06, 10 07, 10 08, 10 09, 10 10, 10 11, 10 12, 10 13, 10 14 as detailed Table TW1 of the application	Wastes from thermal processes
Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy	11 01, 11 02, 11 03, 11 05 as detailed Table TW1 of the application	Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy
Wastes from shaping and physical and mechanical surface treatment of metals and plastics	12 01, 12 03, as detailed Table TW1 of the application	Wastes from shaping and physical and mechanical surface treatment of metals and plastics
Oil wastes and wastes of liquid fuels (except edible oils, 05 and 12)	13 01, 13 02, 13 03, 13 04, 13 05, 13 07, 13 08 as detailed Table TW1 of the application	Oil wastes and wastes of liquid fuels (except edible oils, 05 and 12)
Waste organic solvents, refrigerants and propellants (except 07 and 08)	14 06 as detailed Table TW1 of the application	Waste organic solvents, refrigerants and propellants (except 07 and 08)
Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified	15 01, 15 02, as detailed Table TW1 of the application	Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
Wastes not otherwise specified in the list	16 01, 16 02, 16 03, 16 04, 16 05, 16 06, 16 07, 16 08 16 09, 16 10, 16 11 as detailed Table TW1 of the application	Wastes not otherwise specified in the list
Construction and demolition wastes (including excavated soil from contaminated sites)	17 01, 17 02, 17 03, 17 04, 17 05, 17 06, 17 08 17 09 as detailed Table TW1 of the application	Construction and demolition wastes (including excavated soil from contaminated sites)

Permitted Waste Types

Description	European Waste Catalogue Number (where available) or other specification	Waste type as defined in Table 2.1.2
Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)	18 01, 18 02 as detailed Table TW1 of the application	Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)
Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use	19 01, 19 02, 19 03, 19 04, 19 05, 19 06, 19 07, 19 08 19 09, 19 10, 19 11, 19 12, 19 13 as detailed Table TW1 of the application	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	20 01, 20 02, 20 03, as detailed Table TW1 of the application	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
Any waste authorised under the Radioactive Substances Act 1993	As specified in the Authorisation	

Schedule 7 – R Code Waste

02 03 - Wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation.

02 03 03 - Wastes from solvent extraction

02 07 - Wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa).

02 07 02 - Wastes from spirits distillation

02 07 04 - Materials unsuitable for consumption or processing

04 01 - Wastes from the leather and fur industry

04 01 03 - degreasing wastes containing solvents without a liquid phase

04 02 - Wastes from the textile industry

04 02 10 - Organic matter from natural products (for example grease, wax)

05 01 - Wastes from petroleum refining

05 01 05 - Oil spills

07 01 - Wastes from the manufacture, formulation, supply and use (mfsu) of basic organic chemicals

07 01 03 - Organic halogenated solvents, washing liquids and mother liquors

07 01 04 - Other organic solvents, washing liquids and mother liquors

07 01 07 - Halogenated still bottoms, and reaction residues

07 01 08 - Other still bottoms, and reaction residues

07 02 - Wastes from the mfsu of plastics, synthetic rubber and man-made fibres

07 02 03 - Organic halogenated solvents, washing liquids and mother liquors

07 02 04 - Other organic solvents, washing liquids and mother liquors

07 02 07 - Halogenated still bottoms, and reaction residues

07 02 08 - Other still bottoms, and reaction residues

07 03 - Wastes from the mfsu of organic dyes and pigments

07 03 03 - Organic halogenated solvents, washing liquids and mother liquors

07 03 04 - Other organic solvents, washing liquids and mother liquors

07 03 07 - Halogenated still bottoms, and reaction residues

07 03 08 - Other still bottoms, and reaction residues

07 04 - Wastes from the mfsu of organic plant protection products (except 02 01 08 and 02 01 09) wood preserving agents (except 03 02) and other boicides

07 04 03 - Organic halogenated solvents, washing liquids and mother liquors

07 04 04 - Other organic solvents, washing liquids and mother liquors

07 04 07 - Halogenated still bottoms, and reaction residues

07 04 08 - Other still bottoms, and reaction residues

07 05 - Wastes from the mfsu of pharmaceuticals

07 05 03 - Organic halogenated solvents, washing liquids and mother liquors

07 05 04 - Other organic solvents, washing liquids and mother liquors

07 05 07 - Halogenated still bottoms, and reaction residues

07 05 08 - Other still bottoms, and reaction residues

07 06 - Wastes from the mfsu of fats, grease, soap s, detergents, disinfectants and cosmetics

07 01 03 - Organic halogenated solvents, washing liquids and mother liquors

07 01 04 - Other organic solvents, washing liquids and mother liquors

07 01 07 - Halogenated still bottoms, and reaction residues

07 01 08 - Other still bottoms, and reaction residues

08 01 - Wastes from mfsu and removal of paint and varnish

08 01 11 - Waste paint and varnish containing organic solvents or other dangerous substances

08 01 12 - Waste paint and varnish other than those mentioned in 08 01 11

08 01 17 - Wastes from paint of varnish removal containing organic solvents or other dangerous substances

08 01 18 - Wastes from paint or varnish removal other than those mentioned in 08 01 17

08 01 21 - Waste paint or varnish remover

11 01 - Wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)

11 01 13 - Degreasing wastes containing dangerous substances

11 02 14 - Degreasing wastes other than those mentioned in 11 01 13

13 01 - Waste Hydraulic oils

13 01 01 - Hydraulic oils, containing PCB's

13 01 05 - Non Chlorinated emulsions

13 01 09 - Mineral based chlorinated hydraulic oils

13 01 10 - Mineral based non chlorinated hydraulic oils

13 01 11 - Synthetic hydraulic oils

13 01 12 - Readily biodegradable hydraulic oils

13 01 13 - other hydraulic oils

13 02 - Waste engine, gear and lubricating oils

13 02 05 - Mineral based non chlorinated engine, gear and lubricating oils

13 03 - Waste insulating and heat transmission oils

13 03 01 - Insulating or heat transmission oils containing PCB's

13 03 09 - readily biodegradable insulating and heat transmission oils

13 03 10 - Other insulating and heat transmission oils

13 04 - Bilge oils

13 04 01 - Bilge oils from inland navigation

13 04 02 - Bilge oils from jetty sewers

13 05 - Oil/Water separator contents

13 05 06 - Oil from oil/water separators

13 07 - Wastes of liquid fuels

13 07 01 - fuel oil and diesel

13 07 02 - Petrol

13 07 03 - Other fuels

16 05 - Gases in pressure containers and discarded chemicals

16 05 05 - Gases in pressure containers other than those mentioned in 16 05 04

19 02 - Wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)

19 02 07 - Oil and concentrates from separation

19 08 - Wastes from waste water treatment plants not otherwise specified

19 08 09 - Grease and oil mixture from oil/water separation containing only edible oil and fats

19 08 10 - grease and oil mixture from oil/water separation other than those mentioned in 19 08 09

20 01 - Separately collected fraction (except 15 01)

20 01 25 - Edible oil and fat

20 01 26 - Oil and fat other than those mentioned in 20 01 25