ENVIRONMENT AGENCY

Permit with introductory note

Pollution Prevention and Control (England & Wales) Regulations 2000

Porthmellon Waste Management Site
Council of the Isles of Scilly
St Mary's
Isles of Scilly
TR21 0JY

Permit number

TP3732SE

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Introductory note

This introductory note does not form a part of the Permit

The following Permit is issued under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I.2000 No.1973), as amended, ("the PPC Regulations") to operate an installation carrying out activities covered by the description in Section 5.1 Part A2(a) in Part 1 to Schedule 1 of the PPC Regulations, to the extent authorised by the Permit:

Section 5.1 Part A2(a) - "The Incineration of non-hazardous waste in an incineration plant with a capacity of less than 1 tonne per hour."

Aspects of the operation of the installation which are not regulated by conditions of the Permit are subject to the condition implied by Regulation 12(10) of the PPC Regulations, i.e. 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.

In some sections of the Permit conditions require the Operator to use Best Available Techniques (BAT), in each of the aspects of the management of the installation, to prevent and where that is not practicable to reduce emissions. The conditions do not explain what is BAT. In determining BAT, the Operator should pay particular attention to relevant sections of the IPPC Sector guidance, appropriate Horizontal guidance and other relevant guidance.

This Incineration plant is regulated by the Environment Agency as an A2 Installation under the following Secretary of State Direction:

Regulation of a Part B process under Environment Protection Act 1990 part 1 to be undertaken by the Environment Agency issued on 03/10/96 and effective on 10/10/96.

A non-technical description of the installation is given in the Application, but the main features of the installation are as follows.

This is a 0.5 tonne per hour municipal waste incinerator that incinerates wastes arising in the Isles of Scilly. It is located on St Mary's.

The Incineration plant includes a waste reception pit where a mechanical grab moves the waste into the reciprocating grate combustion chamber. The gases pass to the secondary chamber where the temperature is maintained at 850 °C. Fuel oil is supplied to an auxiliary burner in the secondary chamber that is used to maintain the temperature during start up and shut down. The waste gases are cooled by introduction of ambient air prior to and after a cyclone. This reduces the temperature of the waste gases to 180 °C prior to entering the bag filter house; sorbents used are sodium bicarbonate and activated carbon. The treated waste gases are then released to atmosphere through a 22.5 m stack (A1). Bottom ash falls from the combustion chamber grate onto a conveyor that passes through a water quench. Ferrous metal is removed from the bottom ash before it passes to a skip. Cyclone ash also empties into the bottom ash skip.

The release from A1 is continuously monitored for nitrogen oxides (NOx), sulphur dioxide (SO_2), hydrogen chloride (HCl), total organic carbon (TOC), particulate matter and carbon monoxide (CO). Periodic monitoring of hydrogen fluoride (HF), a range of metals and dioxins and furans also takes place. There are no releases to controlled water or to sewer from the Installation. Uncontaminated surface water is released within the installation to four soakaways (WL1 to WL4).

The Isle of Scilly is an Area of Outstanding Beauty and also has a number of Natura 2000 sites and SSSIs.

The Waste Incineration (England and Wales) Regulations 2002 (SI 2002 No. 2980) (The WI Regulations) and the Pollution Prevention and Control (Waste Incineration Directive) (England and Wales) Direction 2002 together implement the requirements of the Waste Incineration Directive (Directive (EC 2000/76/EC) on the

Incineration of Waste. The Installation regulated under this Permit contains an existing Waste Incineration Installation (as defined in the WI Regulations) in which the incineration of waste in an incineration plant is carried out. Conditions delivering the corresponding requirements of the relevant articles of the Waste Incineration Directive have been incorporated into this Permit.

Note that the Permit requires the submission of certain information to the Agency (see Sections 4 and 5). In addition, the Agency has the power to seek further information at any time under regulation 28 to the PPC Regulations provided that it acts reasonably.

Other PPC Permits relating to this installation		
Permit holder	**Permit Number**	**Date of Issue**
None		

Superseded Licences/Authorisations/Consents relating to this installation		
Holder	**Reference Number**	**Date of Issue**
Council of the isles of Scilly	AY3237	01/12/97

Other activities may take place on the site of this installation which are not regulated under this Permit or any other PPC Permit referred to in the Table above. These activities include abstraction of groundwater from borehole within the Installation boundary.

Other existing Licences/Authorisations/Registrations relating to this site		
Holder	**Reference Number**	**Date of issue**
None		

Public Registers

Considerable information relating to Permits including the Application is available on public registers in accordance with the requirements of the PPC Regulations. Certain information may be withheld from public registers where it is commercially confidential or contrary to national security.

Variations to the Permit

This Permit may be varied in the future (by the Agency serving a Variation Notice on the Operator). If the Operator itself wants any of the Conditions of the Permit to be changed, it must submit a formal Application. The Status Log within the Introductory Note to any such Variation Notice will include summary details of this 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 by the Operator. For the application to be successful, the Operator must be able to demonstrate to the Agency 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, an Application to transfer the Permit has to be made jointly by the existing and proposed holders. 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 comply with the conditions of the transferred Permit. If, however, the Permit authorises the carrying out of a specified waste management activity, the transfer will only be allowed if the proposed holder is also considered to be "a fit and proper person" as required by the PPC Regulations.

Talking to us

Please quote the Permit Number if you contact the Agency about this Permit.

To give a Notification under Condition 5.1.1, the Operator should use the Incident Hotline telephone number (0800 80 70 60) or any other number notified in writing to the Operator by the Agency for that purpose.

Status Log

Detail	Date	Response Date
Application TP3732SE	Received 31/03/05	
Response to request for information	Request dated 12/07/05	Response dated 17/08/05 and 21/10/05
Permit determined		

End of Introductory Note.

Permit
Pollution Prevention and Control Regulations 2000

ENVIRONMENT AGENCY

Permit

Permit number
TP3732SE

The Environment Agency (the Agency) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations (SI 2000 No 1973), hereby authorises **Council of the Isles of Scilly** ("the Operator"),

Of/ whose Registered Office (or principal place of business) is
Town Hall
St Mary's
Isles of Scilly
TR21 0LW

Company registration number not applicable

to operate an installation at
Porthmellon Waste Management Site
St Mary's
Isles of Scilly
TR21 0JY

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

Signed	Date
	14/11/05

Scott McFarlane

Authorised to sign on behalf of the Agency

Conditions

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(2)(a) : Incineration of non-hazardous waste in an incineration plant with a capacity of <1 tonne/hour.	Incineration of municipal waste.	Incineration line, waste reception, storage, waste fuel and air supply systems, facilities for the treatment of exhaust gases, on site facilities for storage of residues and waste water, stack, devices and systems for controlling incineration operations, recording and monitoring incineration conditions
Directly associated activity	Collection and disposal of uncontaminated surface water	Collection of surface run off and discharge to soakaways WL1 to WL4

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 green on the Site Plan at Schedule 5 to this Permit.

1.3 Overarching Management Condition

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

1.4 Improvement Programme

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

Table 1.4.1: Improvement programme		
Reference	**Requirement**	**Date**
IP1	The Operator shall have in place procedures / work instructions to ensure the operation of the incinerator plant meets with BAT. These shall include but are not limited to • Start up and shut down of the incinerator • Operation of continuous emissions monitors • Recording and reporting of emission monitoring data • Operation of abatement equipment • Preventative maintenance system for incineration plant. Written notification that procedures / work instructions are in place shall be sent to the Agency.	Notification to be submitted by 27/12/05
IP2	The Operator shall ensure that the waste feed to the combustion chamber complies with Article 6(3) of WID. A report shall be submitted to and approved by the Agency.	Report to be submitted by 27/12/05
IP3	The Operator shall install and commission continuous emissions monitors at release point A1 for total organic carbon (TOC), nitrogen oxides (NOx), sulphur dioxide (SO_2) and hydrogen chloride (HCl). The commissioning shall also include the peripheral parameters temperature, pressure, moisture content and O_2 that are required to be continuously monitored. The Operator shall notify the Agency once these instruments are installed and forward copies of the MCERTS certificates and any commissioning reports.	Notification, certificates and report to be submitted by 27/12/05
IP4	The Operator shall install a data logger and reporting system in order to achieve the reporting requirements given in Schedule 3 of this permit. The Operator shall notify the Agency on completion of the above.	Notification to be submitted by 27/12/05
IP5	The Operator shall submit a report that validates the residence time and the temperature of gases within the secondary chamber whilst operating at unfavourable conditions.	Report to be submitted by 27/12/05
IP6	The Operator shall submit written proposals to the Agency to install permanent measures to ensure containment of contaminated water generated within the Installation, to prevent any potential discharge to the soakaways WL1 to WL4. The proposals shall address the following areas • Containment of bottom ash • Containment of APC residue • Containment of the bottom ash quench tank • The movement of bottom ash within the Installation • The potential release of leachate from waste deposited on the hardstanding prior to being moved	Proposals to be submitted by 27/12/05

	into the waste reception pit • Oily residues on the hardstanding from vehicle movements within the Installation. The proposals shall include a timetable for improvements. On receipt of written agreement by the Agency to the timetable, the Operator shall carry out the required improvments and submit a report on their completion.	A final report of the improvements undertaken shall be submitted to the Agency within 2 months of completion of the timetable.
IP7	The Operator shall submit a written Accident Plan that shall have regard to Chapter 20 of the Secretary of States Guidance – 'General Guidance Manual on Policy and procedures for A2 and B installations'.	Plan to be submitted by 01/06/06
IP8	The Operator shall develop a written Site Closure plan that shall have regard to Chapter 18, 'Closure' of the Secretary of States Guidance – 'General Guidance Manual on Policy and procedures for A2 and B installations'. On completion of the plan, a summary shall be submitted to the Agency in writing.	Summary to be submitted by 01/06/06
IP9	The Operator shall submit a written report that shall be approved by the Agency and addresses the following points • assess the ability of the abatement system to control HCl emissions • reports the periodic monitoring result for HF • confirms whether Article 11(4) of WID is satisfied.	Report to be submitted by 01/06/06
IP10	The Operator shall sample the duct gases at A1 for dioxins and furans on four separate occasions during a 12 month period, the first determination of which is to be completed within 3 months of the issue of this permit. Sampling will be spread evenly throughout this 12-month period. The method used shall be as given in Table 2.2.2 for dioxins and furans and reporting of the concentration shall have regard to the toxic equivalence concentration for I-TEQ and WHO-TEQ, as given in condition 6.1.5. The bi-annual sampling of dioxins and furans as required in Table 2.2.2 will form two of the samples required in this condition. Each analytical report shall be submitted within 6 weeks of completion of sampling.	Sampling to be completed by 01/11/06
IP11	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.
IP12	The Operator shall assess options to recycle bottom ash in preference to disposal. The findings of the assessment shall be submitted in writing and approved by the Agency.	01/01/07

IP13	The Operator shall have an environment management system (EMS) in place. This shall have regard to Chapter 11 of the Secretary of States guidance – 'General Guidance Manual on Policy and procedures for A2 and B installations'. Written notification that an EMS is in place shall be submitted to the Agency.	Notification to be submitted by 01/12/07
IP14	The Operator shall replace any continuous emissions monitor that does not meet with the requirements of QAL2 given in BS EN 14181.	28/12/07

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 and 2.2 given in pages 7 to 29 of the Application	31/03/05
Further information	The response to the schedule 4 notice given in points 1 to 7, 9, 10, 13 to 15, 17, 19, 20, 24 and 26.	17/08/05
Specific information	• the incineration capacity (B2.1.14) • description of each waste type (mass flow, CV & composition) (B2.1.14) • the waste feed cessation system (B2.1.8) • start-up and shut-down (B2.10.5) • temperature monitoring in the combustion chamber (B2.1.7) • temperature, oxygen, water vapour and pressure at Air Release sampling points (B2.10.14) • for incinerators, alternative arrangements for CO, TOC and dust monitoring to make use of the relevant abnormal operation condition during CEM failure (B2.10.6)	• 31/03/05 • 31/03/05 • 31/03/05 • 31/03/05 • 31/03/05 • 31/03/05 • 31/03/05

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 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
Municipal Waste	Wastes generated within the Isles of Scilly	3500 tonnes per year

2.1.4 No condition applies.

2.1.5 No condition applies.

2.1.6 No condition applies.

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 850°C, or
- the oxygen level is below, or falls below, 6% (wet) , 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 in each line of the Permitted Installation at start-up or shut-down or whenever the operating temperature falls below that specified in condition 2.1.7, 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) may be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.

2.1.9 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) 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 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 No condition applies.

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	Incineration gases via abatement and 22.5 m stack	Chimney, on site plan in Appendix A of further information received 17/08/05

2.2.1.3 The limits for emissions to air for the parameters and emission point 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 parameters and emission point 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) Note1	Monitoring frequency	Monitoring method
A1	Particulate matter	30 mg/m^3 Note 2 periodic	Annual	BS EN 13284-1
A1	Particulate matter	10 mg/m^3 ½ -hr average Note 3 & 4	Continuous measurement	BS EN 13284-2 note 9 & 11
A1	Particulate matter	10 mg/m^3 daily average Note 4	Continuous measurement	BS EN 13284-2 note 9 & 11
A1	Total Organic Carbon (TOC)	20 mg/m^3 Note 2	Annual	BS EN 12619
A1	Total Organic Carbon (TOC)	10 mg/m^3 ½-hr average Note 3 & 4	Continuous measurement	BS EN 12619 note 9 & 11
A1	Total Organic Carbon (TOC)	10 mg/m^3 daily average Note 4	Continuous measurement	BS EN 12619 note 9 & 11
A1	Hydrogen chloride	30 mg/m^3 Note 2	Annual	BS EN 1911
A1	Hydrogen chloride	10 mg/m^3 ½-hr average Note 3 & 4	Continuous measurement	MCERTS certified instruments note 10 & 12
A1	Hydrogen chloride	10 mg/m^3 daily average	Continuous measurement	MCERTS certified instruments note 10 &

Table 2.2.2 : Emission limits to air and monitoring during normal operation				
Emission point reference	**Parameter**	**Limit (including Reference Period)** Note1	**Monitoring frequency**	**Monitoring method**
		Note 4		12
A1	Hydrogen fluoride	2 mg/m^3 periodic over minimum 1-hour period Note 3	Bi-annual	USEPA Method 26/26A
A1	Carbon monoxide	150 mg/m^3 10-minute average Note 2	Continuous measurement	ISO 12039
A1	Carbon monoxide	100 mg/m^3 ½-hr average Note 2	Continuous measurement	ISO 12039
A1	Carbon monoxide	100 mg/m^3 ½-hr average Note 4	Continuous measurement	ISO 12039 Note 7 & 11
A1	Carbon monoxide	50 mg/m^3 daily average Note 4	Continuous measurement	ISO 12039 Note 7 & 11
A1	Sulphur dioxide	300 mg/m^3 Note 2	Annual	BS 6069-4.1
A1	Sulphur dioxide	50 mg/m^3 ½-hr average Note 3 & 4	Continuous measurement	BS 6069-4.4 Note 9 & 12
A1	Sulphur dioxide	50 mg/m^3 daily average Note 4	Continuous measurement	BS 6069-4.4 Note 8 & 11
A1	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	400 mg/m^3 daily average Note 4	Continuous measurement	ISO 10849 Note 8 & 11
A1	Cadmium & thallium and their compounds (total) Note 5	0.05 mg/m^3 periodic over minimum 30 minute, maximum 8 hour period	Bi-annual	BS EN 14385
A1	Mercury and its compounds Note 5	0.05 mg/m^3 periodic over minimum 30 minute, maximum 8 hour period	Bi-annual	BS EN 13211

Table 2.2.2 : Emission limits to air and monitoring during normal operation				
Emission point reference	**Parameter**	**Limit (including Reference Period)** Note1	**Monitoring frequency**	**Monitoring method**
A1	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total) Note 5	0.5 mg/m^3 periodic over minimum 30 minute, maximum 8 hour period	Bi-annual	BS EN 14385
A1	Dioxins / furans (I-TEQ)	0.1 ng/m^3 periodic over minimum 6 hours, maximum 8 hour period Note 6	Bi-annual	BS EN 1948

Note 1: See Section 6 for reference conditions

Note 2: This limit shall be valid until 27/12/05

Note 3: 97% of this value to be achieved over a year.

Note 4: This limit shall commence on 28/12/05.

Note 5: 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 6: 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 7: The Continuous Emission Monitors used shall be such that the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed 10%. Valid half-hourly average values shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted this value of the confidence interval (10%). Where it is necessary to calibrate or maintain the monitor and this means that data is not available for a complete half-hour period, the half-hourly average shall nonetheless be considered valid if measurements are available for a minimum of 20 minutes during the half-hour period. (The number of half-hourly averages so validated shall not exceed 5 per day). Daily average values shall be determined as the average of all the valid half-hourly average values within a calendar day. The daily average value will be considered valid if no more than five half-hourly average values in any day have been determined not to be valid. No more than ten daily average values per year shall be determined not to be valid.

Note 8: As Note 4, except that the value of the confidence interval is 20% in place of 10%.

Note 9: As Note 4, except that the value of the confidence interval is 30% in place of 10%.

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

Note 11: MCERTS certification to the appropriate ranges and determinands is a demonstration of compliance to the applicable standards.

Note 12: 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.

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

Emission point reference	Parameter	Limit (including Reference Period) Note 1	Monitoring frequency	Monitoring method
A1	Particulate matter	150 mg/m^3 ½-hr average	Continuous measurement	BS EN 13824- Note 2 & 4 during abatement plant failure
A1	Total Organic Carbon (TOC)	20 mg/m^3 ½-hr average	Continuous measurement	BS EN 12619 Note 2 & 4 during abatement plant failure
A1	Carbon monoxide	100 mg/m^3 ½-hr average	Continuous measurement	ISO 12039 Note 3 & 4 during abatement plant failure or portable CO analyser during failure of the CO 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 5 per day).

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

2.2.2 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 No emission from the Permitted Installation shall be made to water.

2.2.2.4 No condition applies.

2.2.2.5 No condition applies.

2.2.2.6 No condition applies.

Emissions to sewer

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

2.2.2.8 No condition applies.

2.2.2.9 No condition applies.

2.2.2.10 No condition applies.

2.2.3 Emissions to groundwater

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

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

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

2.2.4 Fugitive emissions of substances to air

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

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

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

2.2.5 Fugitive emissions of substances to water and sewer

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

- all structures under or over ground

- surfacing
- bunding
- storage areas

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

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

2.2.6 Odour

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

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

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

2.2.6.2 No condition applies.

2.2.6.3 No condition applies.

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 Emissions into or onto land from the emission points specified in Table 2.2.10 shall only arise from the sources (and shall be emitted only to the soakaways) specified in that Table and, subject to the other conditions of this Permit, there shall be no other emissions to Land from the Permitted Installation.

Table 2.2.10 Emission points into land

Emission point reference or description	Source	Soakaway
WL1	Uncontaminated site drainage	1, marked on site plan in Appendix A of further information received 17/08/05
WL2	Uncontaminated site drainage	2, marked on site plan in Appendix A of further information received 17/08/05
WL3	Uncontaminated site drainage	3, marked on site plan in Appendix A of further

		information received 17/08/05
WL4	Uncontaminated site drainage	4, marked on site plan in Appendix A of further information received 17/08/05

2.2.7.3 No condition applies.

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 gas oil	Average sulphur content of fuel burned shall not exceed 0.1% by weight after 01/01/08
Bottom ash burn-out quality	The Permitted Installation must be operated to ensure that the bottom ash shall have a total organic carbon (TOC) content less than 3%, or a loss on ignition of less than 5% of the dry weight of the ash

2.3 Management

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

Training

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

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

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

Maintenance

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

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

2.3.6.1 a written or electronic maintenance programme; and

2.3.6.2 records of its maintenance.

Incidents and Complaints

2.3.7 The Operator shall maintain and implement written procedures for:

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

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

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

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

2.4 Efficient use of raw materials

2.4.1 The Operator shall -

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

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

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

2.5 Waste Storage and Handling

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

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

2.6 Waste recovery or disposal

2.6.1 Waste produced at the Permitted Installation shall be:

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

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

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

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

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

2.6.5 Bottom ash and APC residues shall not be mixed

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

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

Table 2.6.1 : Emission limits and monitoring frequency for solid residues

Emission point reference	Substance	Limit (including Reference Period)	Monitoring frequency	Monitoring method
Bottom Ash	TOC	3%	Monthly	Agency ash sampling protocol.

2.7 Energy Efficiency

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

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 Secretary of States Guidance 'General Guidance on Policy and Procedures for A2 and B Installations' as from time to time amended.

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.

2.9.2 No condition applies.

2.9.3 No condition applies.

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.

2.10.4 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
A1	Temperature Note 1	continuous	As described in the Application	Data to be recorded and held on site and not reported to the Agency
A1	Pressure Note 1	continuous	As described in the Application	Data to be recorded and held on site and not reported to the Agency
A1	Oxygen content	continuous	As described in the Application	Data to be recorded and held on site and not reported to the Agency
A1	Water vapour content Note 1	continuous	As described in the Application	Data to be recorded and held on site and not reported to the Agency
Thermocouple positioned vertically in the roof, and at the centre of the secondary chamber outlet duct.	Temperature (° C)	Continuous	As described in the Application	Data to be recorded and held on site and not reported to the Agency
A1	Dioxins / furans (WHO-TEQ Humans / Mammals) Note 2	Bi-annual periodic measurement, average values over sample period of between 6 and 8 hours.	To be determined utilising sampling and analytical techniques developed for dioxins/furans (BS EN 1948)	
A1	Dioxins / furans (WHO-TEQ Fish) Note 2	Bi-annual periodic measurement, average values	To be determined utilising sampling and	

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
		over sample period of between 6 and 8 hours.	analytical techniques developed for dioxins/furans (BS EN 1948)	
A1	Dioxins / furans (WHO-TEQ Birds) Note 2	Bi-annual periodic measurement, average values 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 Humans / Mammals) Note 2	Bi-annual periodic measurement[3], 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 Fish) Note 2	Bi-annual periodic measurement[3], 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 Birds) Note 2	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 hydrocarbons	Bi-annual periodic measurement, average value	Procedure shall use BS ISO 11338-1 and BS-ISO 11338-	

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
	(PAHs), as specified in condition 6.1.1	over sample period of between 6 and 8 hours.	2.	
Bottom Ash	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	Annual	Sampling and analysis as per Agency ash sampling protocol.	
Bottom Ash	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.	
APC Residues	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	Annual	Sampling and analysis as per Agency ash sampling protocol.	
APC Residues	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium,	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**
	Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions			

Note 1: This limit shall commence on 28/12/05.

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.

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 condition 2.10.1 of this Permit and the environmental or other monitoring specified in condition 2.10.4 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing. Newly installed CEMs, or CEMs replacing existing CEMs, shall have MCERTS certification and have an MCERTS certified range which is not greater than 1.5 times the daily emission limit value (ELV) specified in Table 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 No transfer from the Permitted Installation shall be made to effluent treatment plant.

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 No condition applies.

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.

4.1.9 No condition applies

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.

6 Interpretation

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

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

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

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

"*APC residues*" means air pollution control residues

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

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

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

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

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

"*Bottom Ash*" means ash falling through the grate

"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.

"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.

"*ISO*" means International Standards Organisation.

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

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

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

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

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

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

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

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

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

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

"*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 as described in the Application.

"*Staff*" includes employees, directors or other officers of the Operator, and any other person under the Operator's direct or indirect control, including contractors.

"Start-up" is any period, where the plant has been non-operational, after igniting the auxiliary burner until waste has been fed to the incinerator and to initiate steady-state conditions as described in the Application.

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

"Waste 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 no condition applies

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				
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
	e.g. air		
	e.g. groundwater		

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

Part B

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

Part C

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 Council of the Isles of Scilly

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	01/01/06
Total Organic Carbon (TOC) mg/m^3	A1	Every 6 months	01/01/06
Oxides of nitrogen mg/m^3	A1	Every 6 months	01/01/06
Hydrogen chloride mg/m^3	A1	Every 6 months	01/01/06
Hydrogen fluoride mg/m^3	A1	Every 6 months	01/01/06
Particulate matter mg/m^3	A1	Every 6 months	01/01/06
Carbon monoxide mg/m^3	A1	Every 6 months	01/01/06
Cadmium & Thallium and their compounds (total) mg/m^3	A1	Every 6 months	01/01/06
Mercury and its compounds mg/m^3	A1	Every 6 months	01/01/06
Antimony, Arsenic, Lead, Chromium, Cobalt, Copper, Manganese, Nickel and Vanadium and their compounds (total) mg/m^3	A1	Every 6 months	01/01/06
Dioxins / furans (I-TEQ) [Note 1] ng/m^3	A1	Every 6 months.	01/01/07
Dioxins / furans (WHO-TEQ Humans / Mammals) [Note 1] ng/m^3	A1	Every 6 months.	01/01/07
Dioxins / furans (WHO-TEQ Birds) [Note 1] ng/m^3	A1	Every 6 months.	01/01/07
Dioxins / furans (WHO-TEQ Fish) [Note 1] ng/m^3	A1	Every 6 months.	01/01/07
Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	A1	Every 6 months.	01/01/06

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins
Dioxin-like PCBs (WHO-TEQ Fish)	A1	Every 6 months.	01/01/06
Dioxin-like PCBs (WHO-TEQ Birds)	A1	Every 6 months.	01/01/06
Poly-cyclic aromatic hydrocarbons (PAHs)	A1	Every 6 months.	01/01/06
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs. g/kg	Bottom ash and APC Residues	Annual.	01/01/06
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions g/kg	Bottom ash and APC Residues	Before use of a new disposal or recycling route	01/01/06
Energy usage	Installation	Every 12 months	01/01/06
Waste disposal and/or recovery.	Installation	Every 12 months	01/01/06

Note 1: reporting of this parameter to commence on 01/01/07

Schedule 3 - Forms to be used

Table S3: Reporting Forms		
Media or parameter	**Form Number**	**Date of Form**
Air: Periodic monitored emissions biannually	TP3732SE-A1- form dated 01/11/05	01/11/05
Air: Continuously monitored emissions of particulates	TP3732SE-A2- form dated 01/11/05	01/11/05
Air: Continuously monitored emissions of hydrogen chloride	TP3732SE-A3- form dated 01/11/05	01/11/05
Air: Continuously monitored emissions of TOC	TP3732SE-A4- form dated 01/11/05	01/11/05
Air: Continuously monitored emissions of carbon monoxide Commencing 28/12/05	TP3732SE-A5- form dated 01/11/05	01/11/05
Air: Continuously monitored emissions of sulphur dioxide	TP3732SE-A6- form dated 01/11/05	01/11/05
Air: Continuously monitored emissions of oxides of nitrogen	TP3732SE-A7- form dated 01/11/05	01/11/05
Air: Annual summary of compliance data for ½ -hour averages	TP3732SE-A8- form dated 01/11/05	01/11/05
Air: Continuously monitored emissions of carbon monoxide up until 27/12/05	TP3732SE-A9- form dated 01/11/05	01/11/05
Bottom Ash, APC Residues residues: Composition	TP3732SE-Ash1- form dated 01/11/05	01/11/05
Bottom Ash, APC Residues: Solubility	TP3732SE-Ash2- form dated 01/11/05	01/11/05
Energy	TP3732SE-E1- form dated 01/11/05	01/11/05
Waste Return	TP3732SE-R1- form dated 01/11/05	01/11/05
Performance indicators	TP3732SE-PI1- form dated 01/11/05	01/11/05

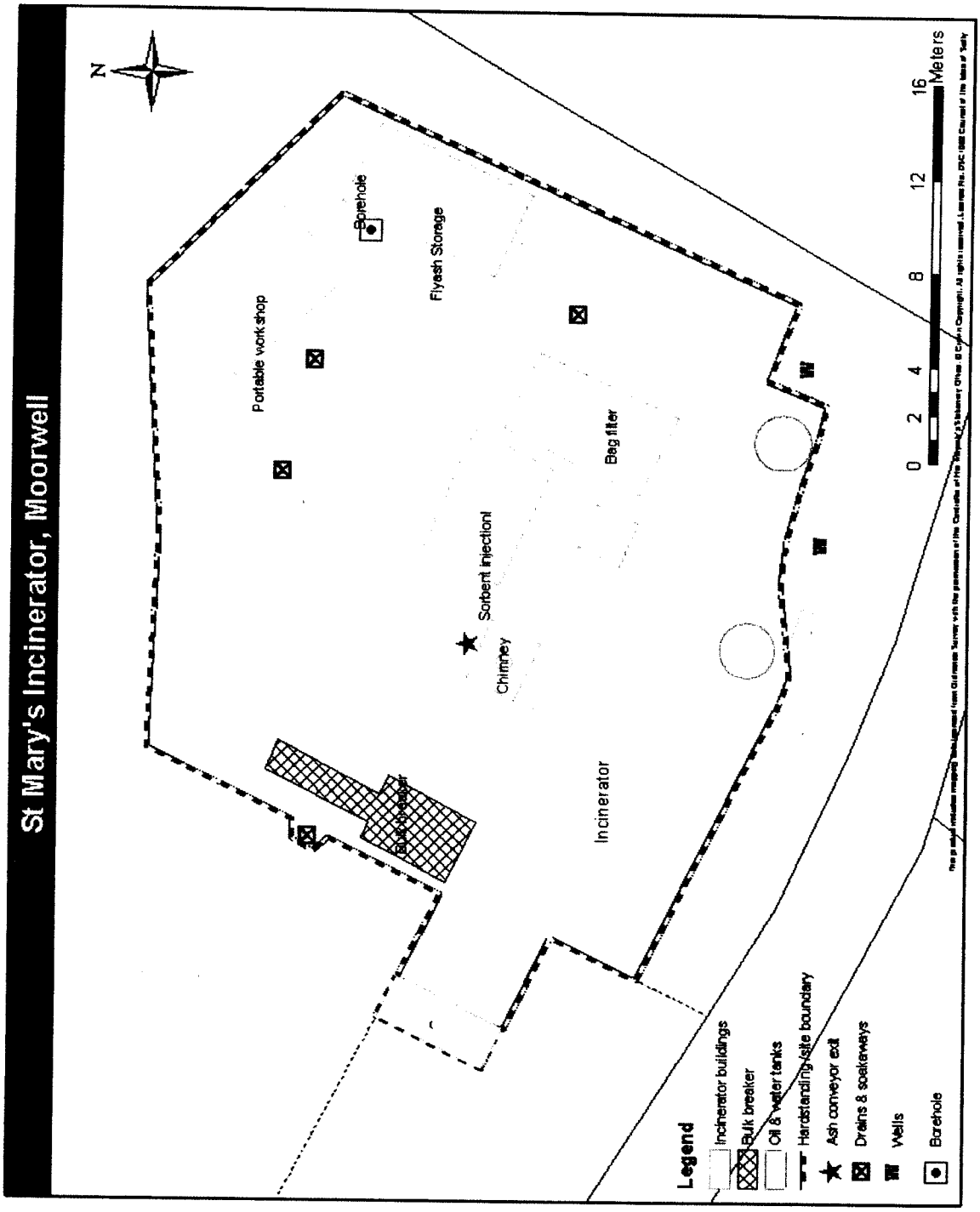
Schedule 4 - Reporting of performance data

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 Municipal Waste Incinerated	tonnes

Table S4.2: Performance parameters		
Parameter	**Frequency of assessment**	**Performance indicator**
Fuel oil consumption	Quarterly	kg/ tonne of waste incinerated (dry basis)

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**
Other Municipal Waste	**20 03**	
Mixed Municipal Waste	20 03 01	Municipal waste

END OF PERMIT