

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

WasteNotts (Reclamation) Limited

Eastcroft EfW Site
Incinerator Road
Off Cattle Market Road
Nottingham
NG2 3JH

Variation application number

EPR/EP3034SN/V002

Permit number

EPR/EP3034SN

Eastcroft EfW Site

Permit number EPR/EP3034SN

Introductory note

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

The following notice gives notice of the variation and consolidation of an environmental permit.

Eastcroft EfW Site is part of an installation, and its purpose is the disposal of non-hazardous waste with energy recovery in an incineration plant. This is the first variation for this permit which was originally issued in 2005.

The Site is part of a multi operator installation which consists of Eastcroft EfW Site and a clinical waste incinerator operated by SRCL Limited. The SRCL Limited permit is not affected by the changes detailed in this variation notice.

The Variation implements the following changes in the Operator's Permit:

- Increased waste throughput of 40,000 tonnes for lines 1 and 2, i.e. an increase of 20,000 tonnes per line;
- The tonnage restrictions of waste which is not mixed municipal waste are removed;
- The method of temperature measurement in the combustion chamber of lines 1 and 2 is changed.

In addition we have made a number of other changes to bring a number of permit conditions in line with the latest Environment Agency permit template. It should be noted that improvement conditions 1 to 8 set out in the original permit have been completed. Improvement conditions 9 and 10 have not yet been completed, however they have been superseded by other conditions in the variation notice and therefore have been deleted.

The schedules specify the changes made to the permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit

Description	Date	Comments
Application EPR/EP3034SN/A001 received	Received 28/03/05	Application for an Incinerator
Additional information received	05/08/05, 01/09/05, 27/09/05, 24/10/05, 13/12/05, 19/12/05 and 31/12/05.	
Permit determined EPR/EP3034SN	22/12/05	Original permit issued to WasteNotts (Reclamation) Limited.
Application EPR/EP3034SN/V002	Duly made 20/05/11	Application to vary and update the permit to modern conditions.
Additional information received	22/07/11	Response to Schedule 5 Notice: Impact on Sensitive habitats assessment (ref: S1054-0100- 0010SMO); and Abnormal emissions assessment (ref: S1054-0100-0009SMO) – both received 22/07/11.
Variation determined EPR/EP3034SN	28/06/12	Varied permit issued.

Other Part A installation permits relating to this installation

Operator	Permit number	Date of issue
SRCL Limited (transferred from White Rose FP3634SL)	EPR/EP3230XE	22/12/05

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

permit number
EPR/EP3034SN

issued to
WasteNotts (Reclamation) Limited ("the operator")

whose registered office is/ whose principal office is

Ground Floor West
900 Pavillion Drive
Northampton Business Park
Northampton
NN4 7RG

company registration number 2674169

to operate part of an installation at

Incinerator Road
Off Cattle Market Road
Nottingham
NG2 3JH

to the extent set out in the schedules.

The notice shall take effect from 28/06/2012

Name

Date

	28/06/2012
---	-------------------

Anne Nightingale

Authorised on behalf of the Environment Agency

Schedule A

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

Schedule B – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number
EPR/EP3034SN

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/EP3034SN/V002 authorising,

WasteNotts (Reclamation) Limited (“the operator”),
whose registered office is

Ground Floor West
900 Pavillion Drive
Northampton Business Park
Northampton
NG2 3JH

company registration number 2674169

to operate part of an installation at

Incinerator Road
Off Cattle Market Road
Nottingham
NG2 3JH

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

Name	Date
<i>Anne Nightingale</i>	28/06/2012

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
- (b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.2 Energy efficiency

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is recovered with a high level of energy efficiency and energy is used efficiently in the activities;
- (b) review and record at least every four years whether there are suitable opportunities to improve the energy recovery and efficiency of the activities; and
- (c) take any further appropriate measures identified by a review.

1.2.2 For line 3, the operator shall provide and maintain steam and/or hot water pass-outs such that opportunities for the further use of waste heat may be capitalised upon should they become practicable.

1.3 Efficient use of raw materials

1.3.1 The operator shall:

- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
- (b) maintain records of raw materials and water used in the activities;
- (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
- (d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 or the Waste Framework Directive; and
- (c) where waste disposal is necessary, this is undertaken in a manner which minimised its impact on the environment.

1.4.2 review and record at least every four years whether changes to those measures should be made; and take any further appropriate measures identified by a review.

1.5 Multiple operator installations

1.5.1 Where the operator notifies the Environment Agency under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operator of the installation of the same information.

1.5.2 The Operator shall immediately notify the Operator of the clinical waste incinerator of any changes in the operational status of lines 1, 2 or 3 that may impact on the operation of the clinical waste incinerator.

2 Operations

2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

2.1.2 Waste authorised by this permit in condition 2.3.3 shall be clearly distinguished from any other waste on the site.

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit, which is within the area edged in red on the site plan that represents the extent of the installation covered by this permit and that of the other operator of the installation.

2.3 Operating techniques

- 2.3.1 (a) The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- (b) If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan specified in schedule 1, table S1.2 or otherwise required under this permit, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.3.2 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.

- 2.3.3 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table S2.2; and
 - (b) it conforms to the description in the documentation supplied by the producer or holder; and
 - (c) if having been separately collected for recycling, it is contaminated and otherwise destined for landfill.
- 2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.
- 2.3.9 Waste shall not be charged, or shall cease to be charged, if:
- (a) the combustion chamber temperature is below, or falls below, 850°C as demonstrated by the application of condition 2.3.10; or
 - (b) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded; or
 - (c) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than under WID abnormal operating conditions ; or
 - (d) monitoring results required to demonstrate compliance with any continuous emission limit value in schedule 3 table S3.1 are unavailable other than under WID abnormal operating conditions.
- 2.3.10 Line 1 and Line 2 incinerators shall be deemed to be operating at a temperature of at least 850°C if the average reading of the three thermocouples installed in the roof of the combustion chamber on each incineration line is at least 720°C, or if one of the thermocouples in the roof is not operational, the average reading of the other two thermocouples installed in the roof of the combustion chamber on each incineration line is at least 720°C.
- 2.3.11 The operator shall have at least one auxiliary burner in each line at start up or shut down or whenever the operating temperature falls below that specified in condition 2.3.9, as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.3.9 is maintained in the combustion chamber, such burner(s) may be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.
- 2.3.12 The operator shall record the beginning and end of each period of “WID abnormal operation”.
- 2.3.13 During a period of “WID abnormal operation”, the operator shall restore normal operation of the failed equipment or replace the failed equipment as rapidly as possible.
- 2.3.14 Where, during “WID 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:

- (a) continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1 due to disturbances or failures of the abatement systems, or continuous emission monitor(s) are out of service, as the case may be, for a total of 4 hours uninterrupted duration;
- (b) the cumulative duration of "WID abnormal operation" periods over 1 calendar year exceeds 60 hours on an incineration line;
- (c) continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1 (a) due to disturbances or failures of the abatement systems;
- (d) the alternative techniques to demonstrate compliance with the "WID abnormal operation" emission limit value(s) for TOC in schedule 3 table S3.1 (a), as detailed in the application or as agreed in writing with the Environment Agency, are unavailable.

2.3.15 The operator shall interpret the end of the period of "WID abnormal operation" as the earliest of the following:

- (a) when the failed equipment is repaired and brought back into normal operation;
- (b) when the operator initiates a shut down of the waste combustion activity, as described in the application or as agreed in writing with the Environment Agency;
- (c) when a period of four hours has elapsed from the start of the "WID abnormal operation";
- (d) when, in any calendar year, an aggregated period of 60 hours "WID abnormal operation" has been reached for a given incineration line.

2.3.16 Bottom ash and APC residues shall not be mixed.

2.4 Improvement programme

2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

2.5 Pre-operational conditions

2.5.1 Line 3 shall not be brought into operation until the measures specified in schedule 1 table S1.4 have been completed.

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2 except in "WID abnormal operation", when there shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1(a) and S3.2.

3.1.2 The limits given in schedule 3 shall not be exceeded.

3.1.3 Wastes produced at the site shall, as a minimum, be sampled and analysed in accordance with schedule 3 table S 3.4. Additional samples shall be taken and tested and appropriate action taken, whenever:

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

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Monitoring

- 3.3.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) point source emissions specified in tables S3.1, S3.1(a) and S3.2;
 - (b) process monitoring specified in table S3.3;
 - (c) residue quality in table S3.4.
- 3.3.2 The operator shall maintain records of all monitoring required by this permit including 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.
- 3.3.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing by the Environment Agency. 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 schedule 3 table S3.1. 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.
- 3.3.4 The provisions for monitoring shall meet the requirements of BS EN 15259. Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.1(a), S3.2 and S3.3 unless otherwise agreed in writing by the Environment Agency.
- 3.3.5 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3 table S3.1; the Continuous Emission Monitors shall be used such that;
- (a) the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed the following percentages:
 - Carbon monoxide 10%
 - Sulphur dioxide 20%
 - Oxides of nitrogen (NO & NO₂ expressed as NO₂) 20%

- Particulate matter 30%
 - Total organic carbon (TOC) 30%
 - Hydrogen chloride 40%
- (b) 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 the value of the confidence intervals in condition 3.3.5 (a);
- (c) where it is necessary to calibrate or maintain the monitor and this means that data are not available for a complete half-hour period, the half-hourly average shall in any case 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;
- (d) 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 shall be considered valid if no more than five half-hourly average values in any day have been determined not to be valid;
- (e) no more than ten daily average values per year shall be determined not to be valid.

3.4 Odour

- 3.4.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.4.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan;
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Noise and vibration

- 3.5.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.5.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan;
 - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

- 4.1.1 All records required to be made by this permit shall:

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
 - (i) off-site environmental effects; and
 - (ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
- (b) the annual production /treatment data set out in schedule 4 table S4.2; and
- (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- (d) the functioning and monitoring of the incineration plant in a format agreed with the Environment Agency. The report shall, as a minimum requirement (as required by Article 12(2) of the Waste Incineration Directive) give an account of the running of the process and the emissions into air and water compared with the emission standards in the WID.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4 ; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.3 Notifications

- 4.3.1 The Environment Agency shall be notified without delay following the detection of:
- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;
 - (b) the breach of a limit specified in the permit; or
 - (c) any significant adverse environmental effects.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
 - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
- Where the operator is a corporate body other than a registered company:
- (a) any change in the operator's name or address; and
 - (b) any steps taken with a view to the dissolution of the operator.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
- (a) the Environment Agency shall be notified at least 14 days before making the change; and
 - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

Schedule 1 - Operations

Table S1.1 activities		
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
S5.1 A1 (c): The incineration of non-hazardous waste in an incineration plant with a capacity of 1 tonne per hour or more.	Incineration of municipal and light / commercial industrial waste in lines 1, 2 and 3.	From receipt of waste to emission of exhaust gas, recovery of heat and disposal of waste arising. Waste types and quantities as specified in Table S2.2 of this permit.
Directly Associated Activity		
Electricity Generation	Generation of electrical power using a steam turbine from energy recovered from the flue gases in line 3.	

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application EPR/EP3034SN/A001	The response to question B2.1 in the application form and section 2.1 of the application text (in process controls) with the exception of responses to B2.1.2 which details the incineration capacity; B2.1.14 which details the annual waste throughput, and B2.1.4.4 which details temperature monitoring.	28/03/05
	The response to question 2 in the Schedule 4 Notice (plant schematic).	05/08/05
	Section 2.2 of the application text (abatement techniques).	28/03/05
	Section 2.4 of the application text (raw materials and wastes to be incinerated with the exception of section 2.4.2.2, "Wastes to be incinerated").	28/03/05
	Section 2.5 of the application text (residual waste handling)	28/03/05
	Section 2.7.1 of the application text (energy recovery).	28/03/05
	The response to question B2.10 in the application form and section 2.10 of the application text (monitoring) with the exception of Table 2.8.	28/03/05
	The additional information supplied concerning surrogate monitoring techniques and wastes to be incinerated with the exception of the surrogate monitoring techniques for particulates.	13/12/05
Minor operational change as detailed in letter from Operator dated 9 th October 2008.	The parts describing a change to the way the APCR (dry dust) is loaded into the tanker for removal off site, by the construction of a new purpose built enclosure which will speed up the process and provide increased protection for the environment.	09/10/08
Minor operational change as detailed in letter from Operator dated 8 th January 2009.	The letter describes a programme of refurbishment works listed below: Replacement of the grate; Replacement feed chute and feeder table; Combustion controls; Replacement of the ash discharger;	08/01/09

Table S1.2 Operating techniques

Description	Parts	Date Received
	Replacement of boiler panels; Control systems; and Other general work.	
Application EPR/EP3034SNV002	Supporting information document reference S1054-0100-0007SMO, sections 1 and 2 which refer to the changes to the permit including the annual waste throughput, removal of restrictions on certain waste types and the changes to temperature monitoring.	20/05/11
Email from Operator	Email confirming abnormal operations provisions are required and the surrogate method for TOC.	Dated 09/12/11

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC11	The Operator shall submit a written report to the Environment Agency on the commissioning of Line 3. The report shall summarise the environmental performance of the plant as installed for Line 3 against the design parameters set out in the Application. The report shall also include a review of the performance of Line 3 against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions.	Within 4 months of the completion of commissioning of Line 3.
IC12	The Operator shall carry out checks to verify the residence time, minimum temperature and oxygen content of the exhaust gases in the furnace on Line 3 whilst operating under the anticipated most unfavourable operating conditions to demonstrate compliance with Articles 6(1) and 11(3) of the Waste Incineration Directive. The results shall be submitted in writing to the Environment Agency.	Within 4 months of the completion of commissioning of Line 3.
1C13	The Operator shall submit a written summary report to the Agency to confirm by the results of calibration and verification testing that the performance of Continuous Emission Monitors on line 3 for parameters as specified in Table S3.1 and Table S3.1(a) complies with the requirements of BS EN 14181, specifically the requirements of QAL1, QAL2 and QAL3	Initial calibration report to be submitted to the Agency within 3 months of completion of commissioning of Line 3. Full summary evidence compliance report to be submitted within 18 months of commissioning of line 3.

Table S1.4 Pre-operational measures	
Reference	Pre-operational measures
The third line shall not be brought into operation until the following information has been submitted to the Environment Agency and the Environment Agency has confirmed in writing its acceptance of the information:	
PO1	A detailed description of the selected design for the incineration plant and all new associated facilities, including plans and diagrams as appropriate, and including the firing diagram for the third line;
PO2	A report of the computational fluid dynamic (CFD) modelling exercise carried out for the third line to demonstrate that the design meets the combustion requirements of the Waste Incineration Directive;
PO3	Detailed proposals for verification of combustion conditions in order to meet the requirements of Article 11(3) of the Waste Incineration Directive;
PO4	If the selected design for the third line does not include flue gas recirculation for control of nitrogen oxides, a full BAT assessment to justify exclusion of this technique;
PO5	A summary of the automated process control systems for the third line, including <i>inter alia</i> , combustion monitoring and control, process interlocks, start up and shut down procedures, alarm conditions and responses;
PO6	<p>Details of the design and operation of the effluent treatment plant and the performance guarantees for the quality of effluent discharged to sewer. The Operator shall undertake an assessment of the impact on the water environment using design data. The operator shall use the methodology prescribed in the Environment Agency's guidance 'Environmental Assessment and Appraisal of BAT' (Ref. IPPC H1) in making this assessment. The Operator shall identify substances present in the effluent that are considered significant, and submit proposed emission limit values for these substances in the form of a report. Flow rate must also be considered as part of this assessment. The report shall also include an effluent monitoring plan for any key substances identified and an action plan to reduce releases of those substances that are considered significant as part of the H1 Assessment. The operator shall implement any improvements or measures as agreed in writing with the Environment Agency.</p> <p>The proposals shall be implemented by the Operator from the date of approval in writing by the Environment Agency;</p>
PO7	Details of the make and model, and mode of operation of the continuous emission monitoring instrumentation;
PO8	A revised noise impact assessment to show the effect of the third line on local noise sensitive receptors, including any newly redeveloped sites in the adjacent area.
Prior to the commencement of commissioning of Line 3:	
PO9	The Operator shall provide a written commissioning plan, including timelines for completion, for approval by the Environment Agency. The commissioning plan shall include the expected emissions to the environment during the different stages of commissioning, the expected durations of commissioning activities and the actions to be taken to protect the environment and report to the Environment Agency in the event that actual emissions exceed expected emissions. Commissioning shall be carried out in accordance with the commissioning plan as approved;
PO10	The Operator shall send a report to the Environment Agency which will contain a comprehensive review of the options available for utilising the heat generated by the waste incineration process in order to ensure that it is recovered as far as practicable. The review shall detail any identified proposals for improving the recovery and utilisation of waste heat (including the use of CHP) and shall provide a timetable for their implementation.

Schedule 2 - Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels

Raw materials and fuel description	Specification
Fuel Oil	Shall not exceed the maximum sulphur content of the gas oil specified in the Sulphur Content of Liquid Fuels Regulations 2000

Table S2.2 Permitted waste types and quantities for incineration plant

Maximum quantity	The total quantity of waste incinerated in Lines 1 and 2 shall not exceed 200,000 tonnes per annum. When line 3 becomes operational, the total quantity of waste incinerated in Lines 1, 2 and 3 shall not exceed 300,000 tonnes per annum.
Waste code	Description
02 01 02	sludges from washing and cleaning
02 01 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 07	wastes from forestry
02 02 02	animal-tissue waste
02 02 03	materials unsuitable for consumption or processing
02 03 04	materials unsuitable for consumption or processing
02 06 01	materials unsuitable for consumption or processing
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03 01	waste bark and wood
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
04 01 08	waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
04 01 09	wastes from dressing and finishing
04 02 09	wastes from composite materials (impregnated textile, elastomer, plastomer)
04 02 10	organic matter from natural products (for example grease, wax)
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
06 13 03	carbon black
07 02 13	waste plastic
07 05 14	solid wastes other than those mentioned in 07 05 13 – not including cytotoxic or cytostatic medicines
08 01 12	waste paint and varnish other than those mentioned in 08 01 11
08 02 01	waste coating powders
09 01 07	photographic film and paper containing silver or silver compounds
09 01 08	photographic film and paper free of silver or silver compounds
09 01 10	single-use cameras without batteries
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
12 01 05	plastics shavings and turnings

Table S2.2 Permitted waste types and quantities for incineration plant

Maximum quantity The total quantity of waste incinerated in Lines 1 and 2 shall not exceed 200,000 tonnes per annum.
When line 3 becomes operational, the total quantity of waste incinerated in Lines 1, 2 and 3 shall not exceed 300,000 tonnes per annum.

Waste code	Description
12 01 21	spent grinding bodies and grinding materials other than those mentioned in 12 01 20
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 04	metallic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 09	textile packaging
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 03 06	organic wastes other than those mentioned in 16 03 05
17 02 01	wood
17 02 03	Plastic
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
19 01 02	ferrous materials removed from bottom ash
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
19 12 01	paper and cardboard
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 10	combustible waste (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20 01 01	paper and cardboard
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 25	edible oil and fat
20 01 32	medicines other than those mentioned in 20 01 31
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 02 01	biodegradable waste
20 02 03	other non-biodegradable wastes
20 03 01	mixed municipal waste
20 03 02	waste from markets

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location <small>Note 2</small>	Parameter	Source <small>Note 3</small>	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1, A2 and A3	Particulate matter	Flue gases	30 mg/m ³	½-hr average	Continuous measurement	BS EN 15267- 3 BS EN 14181
A1, A2 and A3	Particulate matter	Flue gases	10 mg/m ³	daily average	Continuous measurement	BS EN 15267- 3 BS EN 14181
A1, A2 and A3	Total Organic Carbon (TOC)	Flue gases	20 mg/m ³	½-hr average	Continuous measurement	BS EN 15267- 3 BS EN 14181
A1, A2 and A3	Total Organic Carbon (TOC)	Flue gases	10 mg/m ³	daily average	Continuous measurement	BS EN 15267- 3 BS EN 14181
A1, A2 and A3	Hydrogen chloride	Flue gases	60 mg/m ³	½-hr average	Continuous measurement	BS EN 15267- 3 BS EN 14181
A1, A2 and A3	Hydrogen chloride	Flue gases	10 mg/m ³	daily average	Continuous measurement	BS EN 15267- 3 BS EN 14181
A1, A2 and A3	Hydrogen fluoride	Flue gases	2 mg/m ³	periodic over minimum 1-hour period	Bi-annual <small>Note 1</small>	BS ISO 15713
A1, A2 and A3	Carbon monoxide	Flue gases	100 mg/m ³	½-hr average	Continuous measurement	BS EN 15267- 3 BS EN 14181
A1, A2 and A3	Carbon monoxide	Flue gases	50 mg/m ³	daily average	Continuous measurement	BS EN 15267- 3 BS EN 14181
A1, A2 and A3	Sulphur dioxide	Flue gases	200 mg/m ³	½-hr average	Continuous measurement	BS EN 15267- 3 BS EN 14181
A1, A2 and A3	Sulphur dioxide	Flue gases	50 mg/m ³	daily average	Continuous measurement	BS EN 15267- 3 BS EN 14181

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location <small>Note 2</small>	Parameter	Source <small>Note 3</small>	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1, A2 and A3	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	Flue gases	400 mg/m ³	½-hr average	Continuous measurement	BS EN 15267- 3 BS EN 14181
A1, A2 and A3	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	Flue gases	200 mg/m ³	daily average	Continuous measurement	BS EN 15267- 3 BS EN 14181
A1, A2 and A3	Cadmium & thallium and their compounds (total)	Flue gases	0.05 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Bi-annual ^{Note 1}	BS EN 14385
A1, A2 and A3	Mercury and its compounds	Flue gases	0.05 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Bi-annual ^{Note 1}	BS EN 13211
A1, A2 and A3	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	Flue gases	0.5 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Bi-annual ^{Note 1}	BS EN 14385
A1, A2 and A3	Ammonia (NH ₃)	Flue gases	No limit set	½-hr average and / or daily average	Continuous	BS EN 15267- 3 BS EN 14181
A1, A2 and A3	Nitrous oxide (N ₂ O)	Flue gases	No limit set	Periodic over minimum 1-hour period	Bi-annual ^{Note1}	BS EN ISO 21258
A1, A2 and A3	Dioxins / furans (I-TEQ)	Flue gases	0.1 ng/m ³	periodic over minimum 6 hours, maximum 8 hour period	Bi-annual ^{Note 1}	BS EN 1948 Parts 1, 2 and 3
A1, A2 and A3	Dioxins / furans (WHO-TEQ Humans / Mammals)	Flue gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annual ^{Note 1}	BS EN 1948 Parts 1, 2 and 3
A1, A2 and A3	Dioxins / furans (WHO-TEQ Fish)	Flue gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annual ^{Note 1}	BS EN 1948 Parts 1, 2 and 3

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location ^{Note 2}	Parameter	Source ^{Note 3}	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1, A2 and A3	Dioxins / furans (WHO-TEQ Birds)	Flue gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annual ^{Note 1}	BS EN 1948 Parts 1, 2 and 3
A1, A2 and A3	Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	Flue gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annual ^{Note 1}	BS EN 1948-4
A1, A2 and A3	Dioxin-like PCBs (WHO-TEQ Fish)	Flue gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annual ^{Note 1}	BS EN 1948-4
A1, A2 and A3	Dioxin-like PCBs (WHO-TEQ Birds)	Flue gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annual ^{Note 1}	BS EN 1948-4
A1, A2 and A3	Specific individual poly-cyclic aromatic hydrocarbons (PAHs), as specified in Schedule 6.	Flue gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annual ^{Note 1}	BS ISO 11338 Parts 1 and 2.

Note 1: Quarterly for emission point A3 in first year of operation of Line 3, and bi-annual thereafter.

Note 2: Location as described in the Application.

Note 3: A1 - Flue gases from Incinerator Line 1, A2 - Flue gases from Incinerator Line 2, A3 - Flue gases from Incinerator Line 3.

Table S3.1(a) Point source emissions to air during abnormal operation of incineration plant – emission limits and monitoring requirements						
Emission point ref. & location ^{Note 1}	Parameter	Source ^{Note 2}	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1, A2 and A3	Particulate matter	Flue gases	150 mg/m ³	½-hr average	Continuous measurement	BS EN 15267-3 during abatement plant failure
A1, A2 and A3	Total Organic Carbon (TOC)	Flue gases	20 mg/m ³	½-hr average	Continuous measurement	BS EN 15267-3 during abatement plant failure or alternative surrogate as specified in the Application during failure of the continuous emission monitor
A1, A2 and A3	Carbon monoxide	Flue gases	100 mg/m ³	½-hr average	Continuous measurement	BS EN 15267-3 during abatement plant failure

Note 1: Location as described in the Application.

Note 2: A1 - Flue gases from Incinerator Line 1, A2 - Flue gases from Incinerator Line 2, A3 - Flue gases from Incinerator Line 3.

**Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site—
emission limits and monitoring requirements**

Emission point ref. & location <small>Note 1</small>	Parameter	Source	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
S2	To be approved by the Environment Agency in accordance with Pre-operational condition PO6.					

Note 1: Location as described in the Application.

Table S3.3 Process monitoring requirements				
Location or description of point of measurement <small>Note 1</small>	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
North west corner of crane hall	Wind Speed and Direction	Continuous	Anemometer	None specified
In accordance with Condition 2.3.9	Combustion chamber temperature (°C)	Continuous	Traceable to national standards	As agreed in writing with the Agency.
A1, A2 and A3	Exhaust gas temperature	Continuous	Traceable to national standards	As agreed in writing with the Agency.
A1, A2 and A3	Exhaust gas pressure	Continuous	Traceable to national standards	As agreed in writing with the Agency.
A1, A2 and A3	Exhaust gas oxygen content	Continuous	BS EN 15267-3 BS EN 14181	None specified
A1, A2 and A3	Exhaust gas water vapour content	Continuous	BS EN 15267-3 BS EN 14181	Unless gas is dried before analysis of emissions.

Note 1: Location as described in the Application.

Table S3.4 Residue quality

Emission point reference or source or description of point of measurement	Parameter	Limit	Monitoring frequency	Monitoring standard or method *	Other specifications
Bottom Ash	TOC or LOI	<3% for TOC <5% for LOI	Quarterly for combined sample from Lines 1 and 2.	Environment Agency ash sampling protocol	None specified
			Annually for separate samples from Line 1 and 2.		
			Separate sample for Line 3 to be collected monthly for first 12 months of operation, thereafter quarterly.		
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.	No limit set	Quarterly ^{Note 1}	Sampling and analysis as per Environment Agency ash sampling protocol	None specified
Bottom Ash	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	No limit set	Before use of a new disposal or recycling route	Sampling and analysis as per Environment Agency ash sampling protocol	None specified

Table S3.4 Residue quality

Emission point reference or source or description of point of measurement	Parameter	Limit	Monitoring frequency	Monitoring standard or method *	Other specifications
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.	No limit set	Quarterly ^{Note 1}	Sampling and analysis as per Environment Agency ash sampling protocol	None specified
APC Residues	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	No limit set	Before use of a new disposal or recycling route	Sampling and analysis as per Environment Agency ash sampling protocol	None specified

* Or other equivalent standard as agreed in writing with the Environment Agency.

Note 1: Residues from Line 3 shall be sampled monthly in the first year of operation.

Schedule 4 - Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S4.1 Reporting of monitoring data

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.3.1	A1, A2 and A3	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Emissions to sewer Parameters as required by condition 3.3.1	S1 and S2	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
TOC or LOI Parameters as required by condition 3.3.1	Bottom Ash	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.3.1	Bottom Ash	Quarterly ^{Note 1}	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.3.1	Bottom Ash	Before use of a new disposal or recycling route	1 Jan, 1 Apr, 1 Jul and 1 Oct
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.3.1	APC Residues	Quarterly ^{Note 1}	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.3.1	APC Residues	Before use of a new disposal or recycling route	1 Jan, 1 Apr, 1 Jul and 1 Oct
Functioning and monitoring of the incineration plant as required by condition 4.2.2		Annually	1 Jan

Note 1: Every month from line 3 in the first year of operation for Line 3, and quarterly thereafter.

Table S4.2: Annual production/treatment

Parameter	Units
Total Municipal Waste Incinerated (EWC '20' codes)	tonnes
Total Commercial and Industrial Waste Incinerated (Non EWC '20' codes)	tonnes
Electrical energy produced	KWhrs
Thermal energy produced e.g. steam	KWhrs
Electrical energy exported	KWhrs
Electrical energy used on installation	KWhrs
Waste heat utilised by the installation	KWhrs

Table S4.3 Performance parameters

Parameter	Frequency of assessment	Units
Electrical energy exported, imported and used at the installation	Quarterly	KWhrs / tonne of waste incinerated
Fuel oil consumption	Quarterly	Kgs / tonne of waste incinerated
Mass of Bottom Ash produced	Quarterly	Kgs / tonne of waste incinerated
Mass of APC residues produced	Quarterly	Kgs / tonne of waste incinerated
Mass of Other solid residues produced	Quarterly	Kgs / tonne of waste incinerated
Ammonia / Urea consumption	Quarterly	Kgs / tonne of waste incinerated
Activated Carbon consumption	Quarterly	Kgs / tonne of waste incinerated
Lime / Sodium Bicarbonate consumption	Quarterly	Kgs / tonne of waste incinerated
Water consumption	Quarterly	Kgs / tonne of waste incinerated
Periods of WID abnormal operation	Quarterly	No of occasions and cumulative hours for current calendar year for each line.

Table S4.4 Reporting forms

Media/parameter	Reporting format	Date of form
Air: Continuously monitored emissions	Form Air 1 to Air 7 or other form as agreed in writing by the Environment Agency	28/06/12
Air: Periodic monitored emissions	Form Air 8 or other form as agreed in writing by the Environment Agency	28/06/12
Sewer	Form Sewer 1 or other form as agreed in writing by the Environment Agency	28/06/12
Waste disposal and recovery	Form R1 or other form as agreed in writing by the Environment Agency	28/06/12
Water and Other Raw Material Usage	Form WU/RM1 or other form as agreed in writing by the Environment Agency	28/06/12
Energy Usage/Export	Form Energy 1 or other form as agreed in writing by the Environment Agency	28/06/12
Residue quality and Ash solubility	Form Residues 1 and Residues 2 or other form as agreed in writing by the Environment Agency	28/06/12
Other performance indicators – annual waste tonnages and – WID abnormal operation occurrence	Form PI1 and PI2 or other form as agreed in writing by the Environment Agency	28/06/12

Schedule 5 - Notification

These pages outline the information that the operator must provide.

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 EP Regulations.

Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution

To be notified within 24 hours of detection

Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit
--

To be notified within 24 hours of detection unless otherwise specified below

Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B - to be submitted as soon as practicable

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 which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 - Interpretation

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

“accident” means an accident that may result in pollution.

“APC residues” means air pollution control residues

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by the Environment 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.

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

“bottom ash” means ash falling through the grate or transported by the grate and includes ash from within the boiler.

“CEM” Continuous emission monitor

“CEN” means Comité Européen de Normalisation

“dioxin and furans” means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

“disposal” means any of the operations provided for in Annex IIA to Directive 2008/98/EC of the Waste Framework Directive.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

“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.

“hazardous property” has the meaning given in Schedule 3 of the Hazardous Waste (England and Wales) Regulations 2005 No.894 and the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138).

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

“ISO” means International Standards Organisation.

“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.

“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, Dibenz[ah]anthracene, Dibenz[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 the table below.*

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“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.

“recovery” means any of the operations provided for in Annex IIB to Directive 2008/98/EC of the Waste Framework Directive.

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

“start up” is any period, where the plant has been non-operational, after igniting the auxiliary burner until waste has been fed to the plant in sufficient quantity to cover the grate and 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 Bottom Ash, this means the total carbon content of all organic species present in the ash (excluding carbon in elemental form).

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate.

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

“WFD” means Waste Framework Directive (Directive 2008/98/EC of the European Parliament and Council).

“WID abnormal operation” means any technically unavoidable stoppages, disturbances, or failures of the abatement plant or the measurement devices, other than continuous emission monitors for releases to air of TOC, 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.

“year” means calendar year ending 31 December.

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.

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

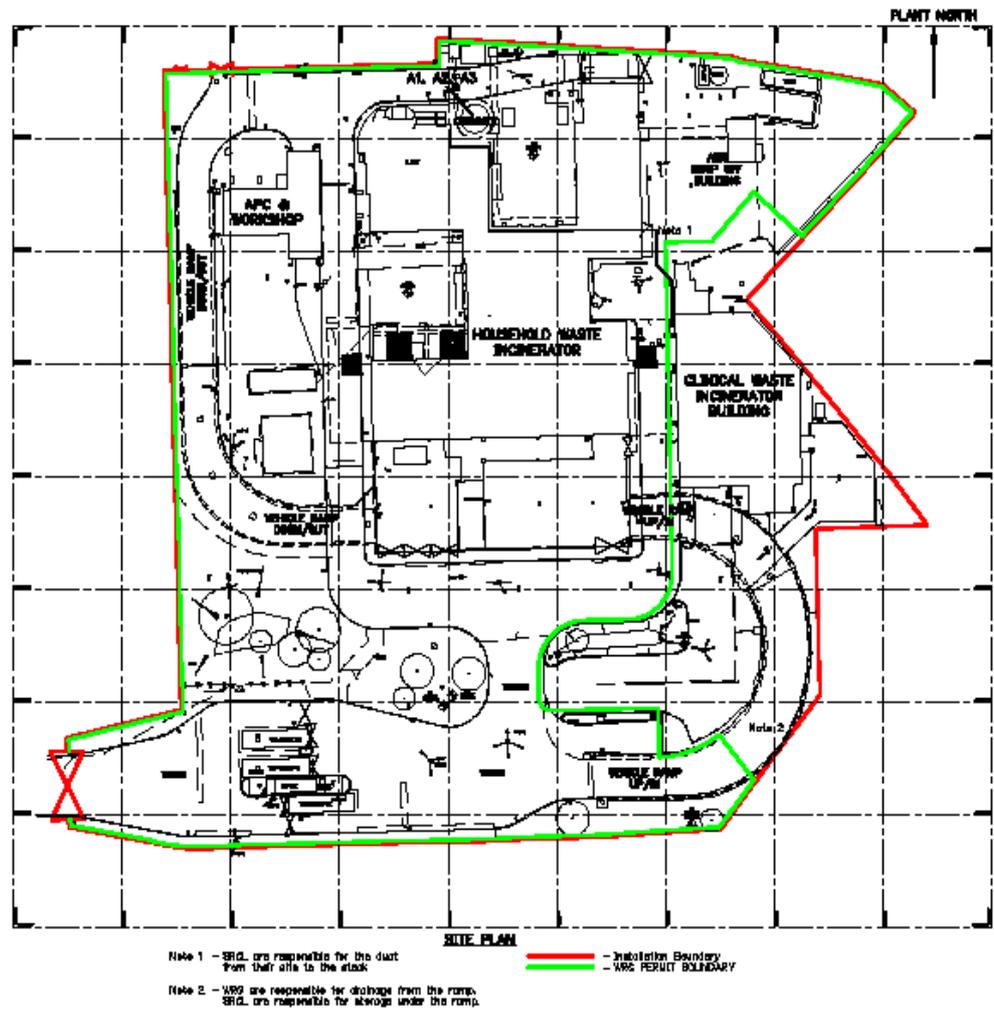
- (a) in relation to gases from incineration and co-incineration plants other than those burning waste oil, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry.

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. When reporting on measurements of dioxins/furans and dioxin-like PCBs, the toxic equivalence concentrations should 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.

TEF schemes for dioxins and furans				
Congener	I-TEF	WHO-TEF		
	1990	2005	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	0.0003	-	-
Furans				
2,3,7,8-TCDF	0.1	0.1	0.05	1
1,2,3,7,8-PeCDF	0.05	0.03	0.05	0.1
2,3,4,7,8-PeCDF	0.5	0.3	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	0.0003	0.0001	0.0001

TEF schemes for dioxin-like PCBs			
Congener	WHO-TEF		
	2005	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)	0.0003	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)	0.03	0.00005	0.001
Mono-ortho PCBs			
2,3,3',4,4'-PeCB (105)	0.00003	<0.000005	0.0001
2,3,4,4',5-PeCB (114)	0.00003	<0.000005	0.0001
2,3',4,4',5-PeCB (118)	0.00003	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.00003	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.00003	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.00003	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00003	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.00003	<0.000005	0.00001

Schedule 7 - Site plan



END OF PERMIT