

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

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

Variation application number

EPR/WP3239SJ/V010

Permit number

EPR/WP3239SJ

Tyseley Energy from Waste Plant

Permit number EPR/WP3239SJ

Introductory note

This introductory note does not form a part of the notice

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

This variation has been issued to update the permit following a statutory review of the permits in the industry sector for incineration. The opportunity has also been taken to consolidate the original permit and subsequent variations. The Industrial Emissions Directive (IED) came into force on 7th January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) conclusions as described in the Commission Implementing Decision. The BAT conclusions for incineration were published on 03 December 2019 in the Official Journal of the European Union (L323) following a European Union wide review of BAT, implementing decision 2017/2117/EU of 21 November 2017.

The schedules specify the changes made to the permit. Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

Brief description of the process

Furnace technology	Moving Grate – municipal waste lines Pulsed stepped hearth – clinical waste line
Number of lines	3
Principal waste type	Municipal, clinical.
Stack height	80 m
Permitted plant capacity	440,500 tonnes per year
Electrical generation capacity	30 MWe

This permit controls the operation of a waste incineration plant. The relevant listed activities are Section 5.1 A(1)(a) and 5.1 A(1)(b). The permit implements the requirements of the EU Directives on Industrial Emissions and Waste.

The main features of the permit are as follows:

The installation comprises an energy from waste facility (EfW) processing approximately 400,000 tonnes per year of municipal and other specified wastes which generates approximately 30 MW gross of electricity, of which 27 MW is available for export to the electricity grid.

The plant consists of three streams. Two of the streams process designated non-hazardous wastes consisting of mainly municipal solid waste (MSW) each at a nominal rate of 23.5 tonnes per hour. A small

quantity of confidential waste, non-hazardous clinical waste and hazardous clinical waste is also incinerated in these streams. Hazardous clinical waste is charged directly to the hopper via a hoist system. The third line processes clinical waste and other designated hazardous waste (CWI) at a nominal rate of 600 kg/hour.

Waste delivered to the installation is incinerated and the heat converted to electrical energy by generating steam in high pressure boilers and expanding the steam through a steam turbine. Air cooled condensers re-circulate condensate back to the boilers. The two MSWI lines have separated waste feed systems, furnaces, boilers and flue gas treatment systems but share a common electricity generation system.

The CWI line has its own waste feed system, furnace and boiler but the flue gas from this stream is treated in one of the flue gas treatment plants attached to the two MSWI lines. The steam produced by the CWI boiler is used to supplement the energy from the two MSWI lines for electricity generation in the same generation system. Bottom ash from the CWI is returned to the MWI reception bunker and mixed with the municipal waste prior to being fed into the MWI where it is subjected to further processing.

The following control measures are used to minimise and abate emissions:

- Selective non-catalytic reduction (SNCR) to abate oxides of nitrogen
- Activated carbon and lime semi-dry for abatement of dioxin/furan and mercury emissions and acid gases.
- Fabric filtration for abatement of particulate matter.
Exhaust gases are emitted to atmosphere via an 80m high stack.
- Operations confined within buildings under slight negative pressure in order to contain and minimise emissions such as odour and dust.

Residues from the combustion process and from the flue gas cleaning system are disposed of by approved means, maximising recycling wherever possible. Residues are transported in appropriate vehicles, suitably enclosed and covered to ensure that no spillage occurs.

Waste water from the process is recycled as far as is reasonably practicable to minimise the quantities released to sewer.

Fuel and chemicals are stored within bunds or double skinned vessels to prevent accidental and inappropriate discharge to the public sewers and water course.

The operator has an Environmental Management System, accredited to ISO 14001 and a Quality Management System accredited to ISO 9001.

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 received EPR/WP3239SJ/A001	01/12/2004	
Additional information received	15/08/2005	
Additional information received	01/11/2005	
Permit issued EPR/WP3239SJ	04/11/2005	
Variation application received EPR/WP3239SJ/V002	27/09/2006	
Variation EPR/WP3239SJ/V002 determined	15/12/2006	
Variation application EPR/WP3239SJ/V003	Duly made 15/02/2007	

Status log of the permit		
Description	Date	Comments
Variation EPR/WP3239SJ/V003 determined	29/06/2007	
Variation application EPR/WP3239SJ/V004	Duly made 24/02/2009	
Variation EPR/WP3239SJ/V004 determined	30/03/2009	
Variation EPR/WP3239SJ/V005 issued	14/07/2009	
Agency initiated variation EPR/WP3239SJ/V006	07/01/2011	
Variation issued	09/05/2011	
Agency variation determined EPR/WP3239SJ/V007	03/01/2014	Agency variation to implement the changes introduced by IED
Variation Application EPR/WP3239SJ/V008	Duly made 31/10/2017	Application to change the Carbon Monoxide (CO) monitoring reference period. Agency variation to add FPP conditions and update monitoring methods.
Variation determined EPR/WP3239SJ	14/02/2018	Varied permit issued.
Variation Application EPR/WP3239SJ/V009	Duly made 30/01/2020	Application to burn infectious clinical waste in municipal waste lines
Variation determined EPR/WP3239SJ	28/05/2020	
Regulation 61 notice issued	10/12/2021	Regulation 61 Notice requiring information for Statutory review of permit. BAT Conclusions published 03 December 2019.
Regulation 61 notice response	11/04/2022 and 13/05/2022	
Variation issued EPR/WP3239SJ/V010	24/11/23	

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2016

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

Permit number

EPR/WP3239SJ

Issued to

Veolia ES Birmingham Limited (“the operator”)

whose registered office is

Tyseley Energy Recovery Facility

James Road

Tyseley

Birmingham

B11 2BA

company registration number 02692681

to operate a regulated facility at

Tyseley Energy from Waste Plant

James Road

Tyseley

Birmingham

B11 2BA

to the extent set out in the schedules.

The notice shall take effect from 24/11/2023

Name	Date
Principal Permitting Team Leader	24/11/2023

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/WP3239SJ

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/WP3239SJ/V010 authorising,

Veolia ES Birmingham Limited (“the operator”),

whose registered office is

Tyseley Energy Recovery Facility

James Road

Tyseley

Birmingham

B11 2BA

company registration number 02692681

to operate an installation at

Tyseley Energy from Waste Plant

James Road

Tyseley

Birmingham

B11 2BA

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

Name	Date
Principal Permitting Team Leader	24/11/2023

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.
 - (c) referenced in schedule 1, table S1.1 (AR1, AR2, AR3), from 03/12/2023, in accordance with a written other than normal operating conditions (OTNOC) management plan.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 The operator shall review the written management system at least every 3 years or otherwise as requested by the Environment Agency.
- 1.1.4 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 efficiency of the activities; and
 - (c) take any further appropriate measures identified by a review.
- 1.2.2 The operator shall review the viability of Combined Heat and Power (CHP) implementation at least every 4 years, or in response to any of the following factors, whichever comes sooner:
- (a) new plans for significant developments within 15 km of the installation;
 - (b) changes to the Local Plan;
 - (c) changes to the UK CHP Development Map or similar; and
 - (d) new financial or fiscal incentives for CHP.

The results shall be reported to the Agency within 2 months of each review, including where there has been no change to the original assessment in respect of the above factors

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 of the Waste Framework Directive; and
 - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.4.2 The operator shall 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.

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 shall be clearly distinguished from any other waste on the site.
- 2.1.3 Hazardous waste shall not be mixed, either with a different category of hazardous waste or with other waste, substances or materials, unless it is authorised by schedule 1 table S1.1 and appropriate measures are taken.

2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in red on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 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.
- 2.3.2 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 which identifies and minimises the risks of pollution relevant to that plan, 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.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
 - (a) it is of a type and quantity listed in schedule 2 tables S2.2, S2.3, S2.4; and

- (b) it conforms to the description in the documentation supplied by the producer or holder.
- 2.3.5 Waste paper, metal, plastic or glass that has been separately collected for the purpose of preparing for re-use or recycling shall not be accepted. Waste from the treatment of these separately collected wastes shall only be accepted if incineration delivers the best environmental outcome in accordance with regulation 12 of the Waste (England and Wales) Regulations 2011.
- 2.3.6 Separately collected fractions other than those listed in condition 2.3.5 shall not be accepted unless they are unsuitable for recovery by recycling.
- 2.3.7 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.
- 2.3.8 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 The operator shall burn only those hazardous wastes where the throughputs, calorific values and pollutant compositions are within the ranges specified in tables S2.3 and S2.4 of schedule 2, unless otherwise agreed in writing with the Environment Agency.
- 2.3.10 The operator shall ensure that prior to accepting waste subject to condition 2.3.9 at the site, it has obtained sufficient information about the hazardous wastes to be burned to demonstrate compliance with the characteristics described in condition 2.3.9.
- 2.3.11 The operator shall take representative samples of all hazardous waste deliveries to the site unless otherwise agreed in writing with the Environment Agency and test a representative selection of these samples to verify conformity with the information obtained as required by condition 2.3.10. These samples shall be retained for inspection by the Environment Agency for a period of at least 1 month after the material is incinerated and results of any analysis made of such samples will be retained for at least 2 years after the material is incinerated.
- 2.3.12 Waste shall not be charged if:
- (a) the combustion chamber temperature is below 850 °C,
 - (b) it is hazardous waste with a hazardous halogenated organic content of more than 1% (expressed as chlorine) and the combustion chamber temperature is below 1,100 °C.
 - (c) it is cytotoxic or cytostatic waste and the combustion chamber temperature is below 1,000°C
 - (d) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded during abnormal operation; or
 - (e) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than during abnormal operation; or
 - (f) continuous emission monitors to demonstrate compliance with any continuous emission limit value in schedule 3 table S3.1 are unavailable other than during abnormal operation; or
 - (g) there is a stoppage, disturbance or failure of the activated carbon abatement system, other than during abnormal operation.
 - (h) continuous emission monitors to demonstrate compliance with the emission limit values for particulates, TOC or CO in schedule 3 are unavailable unless alternative techniques, as agreed in writing with the Environment Agency, are used to demonstrate compliance with those emission limit values.

- 2.3.13 The operator shall record the beginning and end of each period of “abnormal operation”.
- 2.3.14 During a period of “abnormal operation”, the operator shall restore normal operation of the failed equipment or replace the failed equipment as soon as possible.
- 2.3.15 The operator shall interpret the start of the period of “abnormal operation” as the earliest of the following:
- (a) a technically unavoidable stoppage, disturbance, or failure of continuous emission monitors.
 - (b) a technically unavoidable stoppage, disturbance, or failure of the activated carbon abatement system
 - (c) Any other technically unavoidable stoppage, disturbance, or failure of the plant which is causing or could lead to an exceedance of an emission limit value in table S3.1.
- 2.3.16 The operator shall interpret the end of the period of “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) The failed equipment has not been repaired and brought back into normal operation and a single period of abnormal operation reaches a duration of 4 hours after the start of abnormal operation on an incineration line;
 - (d) Abnormal operation occurs on an incineration line and the cumulative duration of abnormal operation periods over 1 calendar year has reached 60 hours on that incineration line;
- 2.3.17 The operator shall have at least one auxiliary burner in each line which shall be operated at start up, shut down and as required during operation to ensure that the operating temperature specified in condition 2.3.12 is maintained as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.3.12 is maintained in the combustion chamber, such burner(s) shall be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.
- 2.3.18 If Infectious clinical waste is burned, it must be placed in the furnace without first being mixed with other categories of waste, using techniques which are no less effective than those described in the application.
- 2.3.19 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.

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, S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3, subject to condition 3.2.1, 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 3.5. 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 limits and monitoring for emission to air for incineration plant

- 3.2.1 The limits for emissions to air apply as follows:
- (a) The limits in table S3.1 shall not be exceeded except during periods of abnormal operation.
 - (b) The limits in table S3.1 (a) shall not be exceeded during abnormal operation.
- 3.2.2 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3 table S3.1 and S3.1(a); 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 of the emission limit values:
 - 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%
 - Ammonia 40%
 - (b) valid half-hourly average values or 10-minute averages 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 3.2.2 (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 or 10 minute period, the half-hourly average or 10-minute average shall in any case be considered valid if measurements are available for a minimum of 20 minutes or 7 minutes during the half-hour or 10-minute period respectively. The number of half-hourly or 10-minute averages so validated shall not exceed 5 or 15 respectively per day;
 - (d) daily average values shall be calculated as follows:
 - the average of valid half hourly averages or 10 minute averages over a calendar day excluding half hourly averages or 10 minute averages during periods of abnormal operation. The daily average value shall be considered valid if no more than five half-hourly average or fifteen 10-minute 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.

3.3 Emissions of substances not controlled by emission limits

- 3.3.1 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.
- 3.3.2 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 which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.3.3 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.
- 3.3.4 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

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 which identifies and minimises the risks of pollution from odour;
 - (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 which identifies and minimises the risks of pollution from noise and vibration;
 - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.6 Monitoring

- 3.6.1 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), S3.2 and S3.3;
 - (b) process monitoring specified in table S3.4;
 - (c) residue quality in table S3.5.
- 3.6.2 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.
- 3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.6.1 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 unless otherwise agreed in writing by the Environment Agency 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. Newly installed Data handling and acquisition systems (DAHS), or DAHS replacing existing DAHS, shall have MCERTS certification.
- 3.6.4 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.

3.7 Pests

- 3.7.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.7.2 The operator shall:
- (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
 - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.8 Fire prevention

- 3.8.1 The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.
- 3.8.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
 - (b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

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 A 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 using the annual report form specified in schedule 4, table S4.4 or otherwise in a format agreed with the Environment Agency. 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;
 - (c) the performance parameters set out in schedule 4 table S4.3
 - (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 Chapter IV of the Industrial Emissions Directive) give an account of the running of the process and the emissions into air and water compared with the emission standards in the IED.
- 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 In the event:

- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately:
 - (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition the operator must immediately:
 - (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- (d) of activation of the emergency release valve the operator must inform the Environment Agency immediately.

4.3.2 Any information provided under condition 4.3.1 (a), (b) or (c), 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 Any information provided under condition 4.3.1 (d) shall be confirmed by sending the information listed in part (a), and part (d) if required, of schedule 5 to this permit within the time period specified in that schedule.

4.3.4 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.

4.3.5 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.

4.3.6 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.

4.3.7 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 "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
AR1	S5.1 A1 (b)	The incineration of non-hazardous waste in a waste incineration plant (two municipal waste lines) with a capacity of 3 tonnes per hour or more.	<p>From receipt of waste to emission of exhaust gas and removal from site of waste arising.</p> <p>Waste types and quantities as specified in Table S2.2 of this permit via reception hall or direct charge to furnace via the feed hopper hoist system.</p> <p>Non hazardous waste types and quantities as specified in Table S2.3 of this permit, direct charge to furnace via the feed hopper hoist system.</p>
AR2	S5.1 A1 (a)	The incineration of hazardous waste in a waste incineration plant (two municipal waste lines) with a capacity of 10 tonnes per day or more.	<p>From receipt of waste to emission of exhaust gas and removal from site of waste arising.</p> <p>Waste charged direct to furnace feed hopper via hoist system.</p> <p>Hazardous waste types and quantities as specified in Table S2.3 of this permit.</p> <p>Infectious clinical waste shall be no more than 5% of the total waste throughput of the municipal waste incineration lines. Infectious clinical waste shall be stored as specified for activity AR3</p>
AR3	S5.1 A1 (a)	The incineration of hazardous waste in a waste incineration plant (high temperature incinerator (HTI)) with a capacity of 10 tonnes per day or more.	<p>Incineration in the high temperature incinerator (HTI).</p> <p>From receipt of waste to emission of exhaust gas and removal from site of waste arising.</p> <p>The amount of hazardous waste stored on site at any one time shall not exceed 60 tonnes.</p> <p>Waste shall be stored on impermeable surfacing with sealed drainage.</p> <p>Waste shall not be stored in vehicles or vehicle trailers, unless they are being received for immediate offloading or if rejected wastes are being stored prior to removal from site (that is, they will be removed from site within 24 hours, or 72 hours if over a weekend).</p>

			<p>From the date that improvement programme IC5 has been met pharmaceutical, chemical, anatomical and palletised waste shall be stored securely within designated areas of the building or otherwise as agreed in writing with the Environment Agency.</p> <p>Infectious clinical waste shall be stored for no longer than 7 days if outside, or for no longer than 14 days if stored in a building.</p> <p>Refrigerated anatomical waste shall be stored for no longer than 14 days.</p> <p>Unrefrigerated anatomical waste shall be stored for no longer than 24 hours, or up to 72 hours if over a weekend.</p> <p>The following waste types shall be stored on site for no longer than 6 months:</p> <ul style="list-style-type: none"> • non-infectious cytotoxic and cytostatic medicines • other hazardous chemicals or other hazardous wastes <p>Notwithstanding the limits given above where a shorter storage time period is given in an agreed management plan then that time period shall take precedence.</p> <p>No waste types shall be submitted to this activity other than those wastes specified in Schedule 2, Table S2.2, S2.3 and S2.4</p>
Directly Associated Activity			
AR4	Electricity Generation	Generation of 30 MWe electrical power using a steam turbine from energy recovered from the flue gases.	
AR5	Cleaning and disinfection of containers and carts.	Washer that cleans and disinfects.	<p>Handling, cleaning and storage of containers and carts prior to dispatch</p> <p>Bin, container or cart washing equipment shall be purpose-built, contained and located in a designated area of the facility provided with self-contained drainage. The cart or bin wash must be designed to collect and</p>

			contain all wash waters, including any spray.
--	--	--	---

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application EPR/WP3239SJ/A001	The response to questions 2.1 and 2.2 given in pages 4 to 41 of the application including the additional information received on 15/08/2005 and 01/11/2005.	01/12/2004
Variation application (EPR/WP3239SJ/V009)	The response to question 3 of application form C3. Supporting statement sections: 3, 4.2, 5, 7 and 8	30/01/2020
Minor operational change	Change in design of cart/bin wash	11/11/2021
Healthcare waste: appropriate measures for permitted facilities Version published 13 July 2020	Other than: <ul style="list-style-type: none"> those parts to which an improvement programme requirement applies in Table S1.3 (and only until the date that the improvement has been or must be met, whichever is the earlier.) all of the following parts of the appropriate measures guidance shall apply: <ul style="list-style-type: none"> Waste pre-acceptance, acceptance and waste tracking appropriate measures Waste storage, segregation and handling appropriate measures – measure 	-
Chemical waste: appropriate measures for permitted facilities Version published 18 November 2020	Measures as approved through improvement condition IC7	-
Response to regulation 61 notice	Operating techniques as set out in the response to the regulation 61 notice.	11/04/2022 and 13/05/2022

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	The operator shall perform a study to determine the extent to which the operation of the current systems in place at the plant to minimise NOx emissions can be further optimised such that emissions are reduced as far as possible below 180 mg/Nm ³ as a daily average, without significantly increasing emissions of other pollutants or having a significant negative effect on plant operation, reliability or bottom ash quality. The study shall be based on the results of trials carried out at the installation and shall have regard to the recommendations for test	24/05/24

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<p>conditions set out in Section 5.4.3 of report titled 'Establishing factors that influence NOx reduction at waste incineration plant to levels below the upper end of the BAT-AELs' (dated 14/01/2022), or other methodology agreed in writing with the Environment Agency. A written report of the study shall be submitted to the Environment Agency for approval which shall include but not necessarily be limited to the following:</p> <ul style="list-style-type: none"> • A brief description of the currently installed measures at the installation to minimise NOx emissions, including details of how the reagent dosing system responds to emissions monitoring data and historic data which illustrates the current achievable level of daily NOx emissions. • The results of trials conducted to further reduce daily average NOx emissions using currently installed measures, including: <ul style="list-style-type: none"> ○ a description of the parameters that were varied during the trial e.g. ammonia or urea feed rates, physical form of urea injected, air flows, and the range over which they were varied ○ the levels of NOx achieved and associated levels of ammonia and nitrous oxide emissions and reagent consumption ○ observed effects and predicted long-term impacts on plant operation, reliability and maintenance regime ○ any changes to the composition of the bottom ash and boiler ash and the implications of those changes for the ability to process and use the ash, as well as for the pollution potential of the ash both during processing and its subsequent use as a secondary aggregate ○ any other relevant cross-media effects <p>The report shall also include a description of the extent to which current systems in place at the plant to minimise NOx emissions can be optimised on a permanent basis, including justification and an implementation plan where relevant.</p>	
IC2	The operator shall submit a report to the Environment Agency for approval on whether waste feed to the plant can be proven to have a low and stable mercury content. The report shall have regard to BAT 4 of the BAT conclusions, be based on historic mercury emissions monitoring data and have regard to the Environment Agency Mercury Monitoring Protocol.	30/11/23
IC3	The operator shall submit a report to the Environment Agency for approval on whether dioxin emissions to air are stable. The report shall have regard to BAT 4 of the BAT conclusions, be based on historic dioxin emissions monitoring data and have regard to the Environment Agency Dioxins Monitoring Protocol.	30/11/23

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC4	<p>The operator shall review and update their waste pre-acceptance and/or waste acceptance procedures to ensure that they meet the requirements of the Environment Agency guidance Healthcare waste: appropriate measures for permitted facilities. Specifically, they must demonstrate that the following appropriate measures of the guidance will be met: Waste acceptance points 23, 33 and 35 A copy of the updated procedure(s) shall be submitted to the Environment Agency for approval.</p>	24/05/24
IC5	<p>The operator shall review and update their waste storage procedures to ensure that they meet the requirements of the Environment Agency guidance Healthcare waste: appropriate measures for permitted facilities. Specifically, they must demonstrate that the following appropriate measures of the guidance or alternative measures as agreed in writing with the Environment Agency will be met :</p> <ul style="list-style-type: none"> • Waste storage point 9 <p>A copy of the updated procedure(s) shall be submitted to the Environment Agency for approval.</p>	24/08/24
IC6	<p>The operator shall review site drainage to ensure it meets the requirements of Waste acceptance points 27 of the Environment Agency guidance Healthcare waste: appropriate measures for permitted facilities or alternative measures as agreed in writing with the Environment Agency. The operator shall submit a report with any proposed improvements (if identified) and timescales for implementing them to the Environment Agency for approval. The operator shall implement any improvements from the date of approval by the Environment Agency.</p>	24/11/24
IC7	<p>The operator shall review techniques against the following sections of the Chemical waste: appropriate measures for permitted facilities guidance (Version published 18 November 2020)</p> <ul style="list-style-type: none"> • Waste pre-acceptance, acceptance, and tracking • Waste storage, segregation, and handling <p>The operator shall submit a report to the Environment Agency for approval to demonstrate which measures are currently complied with. Where measures are not currently complied with the report shall include details and justification of:</p> <ul style="list-style-type: none"> • When measures will be complied with; and/or • Measures that are not relevant; and/or • Alternative techniques 	24/05/24
IC8	<p>The operator shall carry out an assessment of the power demand associated with critical equipment required to maintain combustion and abatement systems and prevent operation of the emergency release valve (ERV) until the plant can be shut down safely or returned to normal</p>	24/05/24

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<p>operation. A comparison of this load (kWe) with the current provision for back-up power systems, and their response time in the event of:</p> <p style="padding-left: 40px;">(i) fluctuations in power to the site, and</p> <p style="padding-left: 40px;">(ii) the total loss of power to the facility</p> <p>shall be undertaken. Critical equipment shall include but not be limited to, the ID fan, compressed air systems, boiler feedwater pumps, PLC and auxiliary burners, CEMS as well as any other equipment identified in your response to the Regulation 61 Notice (received on 15/05/22).</p> <p>A report of the assessment shall be submitted to the Environment Agency for approval.</p>	
IC9	<p>Upon notification from the Environment Agency following the operation of the emergency release valve (ERV) due loss of or fluctuations in power the operator shall undertake an assessment of the technical and practical viability of installing back-up power equipment at the installation that are of sufficient capacity (as a minimum for the kWe identified in IC8) and have an appropriate response time to avoid activation of the emergency release valve (ERV) and maintains combustion following interruption or failure of power supply to the facility.</p> <p>A report on the assessment shall be submitted to the Environment Agency for approval.</p> <p>The operator shall install and integrate measures for the provision of back-up power within 12 months from the date of approval</p>	6 months from written notification from the Environment Agency
IC10	<p>The operator shall develop a method for assessing and identifying the root cause of the operation of the emergency release valve (ERV). The method shall have regard to the approach proposed in the Report titled 'Emergency Releases from the Incineration of Hazardous and Healthcare Waste' dated 26 June 2023 and shall include as a minimum an assessment of the adequacy of:</p> <ul style="list-style-type: none"> • The design and specification of equipment to prevent mechanical and electrical failure of critical equipment • The provision of back-up systems, redundancy and availability of spares for critical equipment • Planned Preventative Maintenance of critical equipment • Site management including Operating Procedures and management of personnel • A rolling assessment of mitigation measures that will prevent re-occurrence of the cause of an ERV activation 	24/05/24

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	The operator shall submit details of the method to be used to the Environment Agency for approval and incorporate it into their Environmental Management System.	
IC11	<p>Upon notification from the Environment Agency following the repeat operation of the emergency release valve (ERV) the operator shall undertake a detailed review of the design, provision of redundancy and maintenance regimes for critical equipment and operating procedures that may result in operation of the emergency release valve (ERV).</p> <p>The review shall have regard to the immediate and root causes and mitigation measures identified in the Report titled 'Emergency Releases from the Incineration of Hazardous and Healthcare Waste' dated 26 June 2023.</p> <p>A report of the findings of the review and details of proposed improvements to reduce the potential for activation of the ERV, including timescales for their implementation, shall be submitted to the Environment Agency for approval.</p>	9 months from written notification from the Environment Agency
IC12	<p>Following notification from the Environment Agency after repeat operation of the emergency release valve (ERV), the Operator shall undertake air dispersion modelling on the short-term environmental impact of the operation of the ERV on air quality and the environment. The assessment shall follow the approach in the Environment Agency's Air Emissions Risk Assessment guidance and have regard to the nature and duration of ERV activations that occurred during the last 3 years of the operation of the installation.</p> <p>The methodology for the impact assessment including assumptions on pollutant concentrations, exhaust gas characteristics and event durations shall be agreed with the Environment Agency in advance of the modelling being undertaken.</p> <p>The operator shall submit a report summarising the dispersion modelling and the results to the Environment Agency for approval</p>	9 months from written notification from the Environment Agency

Schedule 2 – Waste types, raw materials and fuel

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Fuel Oil	< 0.1% sulphur content

Table S2.2 Permitted waste types and quantities for incineration via reception hall or direct charge to furnace via the feed hopper hoist system	
Maximum quantity	435,500 tonnes per year total in combination with wastes in table S2.3
Waste code	Description
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 03	plant-tissue waste
02 01 07	wastes from forestry
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 03	materials unsuitable for consumption or processing
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 04	materials unsuitable for consumption or processing
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing
02 06	wastes from the baking and confectionery industry
02 06 01	materials unsuitable for consumption or processing
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
02 07 04	materials unsuitable for consumption or processing
03	WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD
03 01	wastes from wood processing and the production of panels and furniture
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
04	WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES
04 02	wastes from the textile industry
04 02 09	wastes from composite materials (impregnated textile, elastomer, plastomer)

Table S2.2 Permitted waste types and quantities for incineration via reception hall or direct charge to furnace via the feed hopper hoist system

Maximum quantity	435,500 tonnes per year total in combination with wastes in table S2.3
Waste code	Description
04 02 15	wastes from finishing other than those mentioned in 04 02 14
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
07	Waste from organic chemical processes
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres
07 02 13	waste plastic
07 05	wastes from the MFSU of pharmaceuticals
07 05 14	solid wastes other than those mentioned in 07 05 13
09	WASTES FROM THE PHOTOGRAPHIC INDUSTRY
09 01	wastes from the photographic industry
09 01 10	single-use cameras without batteries
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
15	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01	packaging (including separately collected municipal packaging waste)
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	absorbents, filter materials, wiping cloths and protective clothing
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
16	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 02	wastes from electrical and electronic equipment
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 03	off-specification batches and unused products
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
16 05	gases in pressure containers and discarded chemicals
16 05 05	gases in pressure containers other than those mentioned in 16 05 04
18	WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)

Table S2.2 Permitted waste types and quantities for incineration via reception hall or direct charge to furnace via the feed hopper hoist system	
Maximum quantity	435,500 tonnes per year total in combination with wastes in table S2.3
Waste code	Description
18 01	wastes from natal care, diagnosis, treatment or prevention of disease in humans
18 01 04	wastes whose collection and disposal is not subject to special requirements in order to prevent infection(for example dressings, plaster casts, linen, disposable clothing, diapers)
18 01 07	chemicals other than those mentioned in 18 01 06
18 01 09	other waste medicines, excluding cytotoxic and cytostatic medicines – human healthcare
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals
18 02 06	chemicals other than those mentioned in 18 02 05
18 02 08	other waste medicines, excluding cytotoxic and cytostatic
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 10	combustible waste (refuse derived fuel)
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	separately collected fractions (except 15 01)
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 30	detergents other than those mentioned in 20 01 29
20 01 32	medicines other than those mentioned in 20 01 31
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 99	non-infectious offensive waste – municipal, separately collected fractions not from healthcare or research-related sources
20 02	garden and park wastes (including cemetery waste)
20 02 01	biodegradable waste
20 03	other municipal wastes

Table S2.2 Permitted waste types and quantities for incineration via reception hall or direct charge to furnace via the feed hopper hoist system

Maximum quantity	435,500 tonnes per year total in combination with wastes in table S2.3
Waste code	Description
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 04	septic tank sludge
20 03 07	bulky waste

Table S2.3 Permitted waste types and quantities for incineration via the main plant hoist

Maximum quantity	435,500 tonnes per year total in combination with wastes in table S2.2
Waste code	Description
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 02	animal-tissue waste
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 02	animal-tissue waste
18	WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)
18 01	wastes from natal care, diagnosis, treatment or prevention of disease in humans
18 01 03* and 18 01 09	infectious waste, medicinally contaminated (not cytotoxic or cytostatic)
18 01 09	other waste medicines, excluding cytotoxic and cytostatic medicines – human healthcare
18 01 04	wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals
18 02 02*	infectious waste, not contaminated with chemicals or medicines infectious gypsum wastes (for example, plaster casts and moulds)
18 02 02* and 18 02 08	infectious waste, medicinally contaminated (not cytotoxic or cytostatic)

Table S2.3 Permitted waste types and quantities for incineration via the main plant hoist	
Maximum quantity	435,500 tonnes per year total in combination with wastes in table S2.2
Waste code	Description
18 02 03	wastes whose collection and disposal is not subject to special requirements in order to prevent infection
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	separately collected fractions (except 15 01)
20 01 99	non infectious offensive waste – municipal, separately collected fractions not from healthcare or research-related sources

Table S2.4 Permitted waste types and quantities for incineration for the high temperature incinerator (HTI)	
Maximum quantity	5,000 tonnes per year throughputs, calorific values and pollutant composition as specified in the application Wastes specified in tables S2.2 and S2.3 may also be burned in the HTI
Waste code	Description
03	WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD
03 01	wastes from wood processing and the production of panels and furniture
03 01 04*	sawdust, shavings, cuttings, wood, particle board and veneer containing hazardous substances
04	WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES
04 02	wastes from the textile industry
04 02 14*	wastes from finishing containing organic solvents
04 02 16*	dyestuffs and pigments containing hazardous substances
07	WASTES FROM ORGANIC CHEMICAL PROCESSES
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
07 01 03*	organic halogenated solvents, washing liquids and mother liquors
07 01 04*	other organic solvents, washing liquids and mother liquors
07 01 09*	halogenated filter cakes and spent absorbents
07 01 10*	other filter cakes and spent absorbents
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres
07 02 03*	organic halogenated solvents, washing liquids and mother liquors
07 02 04*	other organic solvents, washing liquids and mother liquors
07 02 09*	halogenated filter cakes and spent absorbents

Table S2.4 Permitted waste types and quantities for incineration for the high temperature incinerator (HTI)	
Maximum quantity	5,000 tonnes per year throughputs, calorific values and pollutant composition as specified in the application Wastes specified in tables S2.2 and S2.3 may also be burned in the HTI
Waste code	Description
07 02 10*	other filter cakes and spent absorbents
07 03	wastes from the MFSU of organic dyes and pigments (except 06 11)
07 03 03*	organic halogenated solvents, washing liquids and mother liquors
07 03 04*	other organic solvents, washing liquids and mother liquors
07 03 09*	halogenated filter cakes and spent absorbents
07 03 10*	other filter cakes and spent absorbents
07 04	wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides
07 04 03*	organic halogenated solvents, washing liquids and mother liquors
07 04 04*	other organic solvents, washing liquids and mother liquors
07 04 09*	halogenated filter cakes and spent absorbents
07 04 10*	other filter cakes and spent absorbents
07 04 13*	solid wastes containing hazardous substances
07 05	wastes from the MFSU of pharmaceuticals
07 05 03*	organic halogenated solvents, washing liquids and mother liquors
07 05 04*	other organic solvents, washing liquids and mother liquors
07 05 09*	halogenated filter cakes and spent absorbents
07 05 10*	other filter cakes and spent absorbents
07 05 13*	solid wastes containing hazardous substances
07 05 14	solid wastes other than those mentioned in 07 05 13
07 06	wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
07 06 03*	organic halogenated solvents, washing liquids and mother liquors
07 06 04*	other organic solvents, washing liquids and mother liquors
07 06 09*	halogenated filter cakes and spent absorbents
07 06 10*	other filter cakes and spent absorbents
07 07	wastes from the MFSU of fine chemicals and chemical products not otherwise specified
07 07 03*	organic halogenated solvents, washing liquids and mother liquors
07 07 04*	other organic solvents, washing liquids and mother liquors
07 07 09*	halogenated filter cakes and spent absorbents
07 07 10*	other filter cakes and spent absorbents
09	WASTES FROM THE PHOTOGRAPHIC INDUSTRY
09 01	wastes from the photographic industry

Table S2.4 Permitted waste types and quantities for incineration for the high temperature incinerator (HTI)	
Maximum quantity	5,000 tonnes per year throughputs, calorific values and pollutant composition as specified in the application Wastes specified in tables S2.2 and S2.3 may also be burned in the HTI
Waste code	Description
09 01 11*	single-use cameras containing batteries included in 16 06 01, 16 06 02 or 16 06 03
15	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01	packaging (including separately collected municipal packaging waste)
15 01 10*	packaging containing residues of or contaminated by hazardous substances
15 02	absorbents, filter materials, wiping cloths and protective clothing
15 02 02*	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances
16	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 03	off-specification batches and unused products
16 03 03*	inorganic wastes containing hazardous substances
16 03 05*	organic wastes containing hazardous substances
16 05	gases in pressure containers and discarded chemicals
16 05 04*	gases in pressure containers (including halons) containing hazardous substances
18	WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)
18 01	wastes from natal care, diagnosis, treatment or prevention of disease in humans
18 01 01	non-infectious sharps, not contaminated with chemicals or medicines
18 01 02	non-infectious anatomical waste, not chemically preserved
18 01 02 and 18 01 06*	non-infectious anatomical waste, chemically preserved, hazardous chemicals
18 01 02 and 18 01 07	non-infectious anatomical waste, chemically preserved, non-hazardous chemicals
18 01 03*	infectious waste, not contaminated with chemicals or medicines (may contain sharps) infectious anatomical waste, not chemically preserved infectious gypsum wastes (for example, plaster casts and moulds)
18 01 03* and 18 01 06* or 18 01 07	infectious waste, contaminated with chemicals infectious anatomical waste, chemically preserved
18 01 03* and 18 01 08* or 20 01 31*	infectious waste, contaminated with cytotoxic and cytostatic medicines – (may contain sharps)
18 01 06*	chemicals consisting of or containing hazardous substances
18 01 08*	cytotoxic and cytostatic medicines

Table S2.4 Permitted waste types and quantities for incineration for the high temperature incinerator (HTI)	
Maximum quantity	5,000 tonnes per year throughputs, calorific values and pollutant composition as specified in the application Wastes specified in tables S2.2 and S2.3 may also be burned in the HTI
Waste code	Description
18 02	wastes from research, diagnosis, treatment or prevention of disease involving animals
18 02 01	sharps (except 18 02 02)
18 02 02*	infectious waste, not contaminated with chemicals or medicines (may contain sharps) infectious anatomical waste, not chemically preserved infectious gypsum wastes (for example, plaster casts and moulds)
18 02 02* and 18 02 05*	infectious waste, contaminated with chemicals infectious anatomical waste, chemically preserved
18 02 02* and 18 02 07* or 20 01 31*	infectious waste, contaminated with cytotoxic and cytostatic medicines (may contain sharps)
18 02 05*	chemicals consisting of or containing hazardous substances
18 02 07*	cytotoxic and cytostatic medicines
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	separately collected fractions (except 15 01)
20 01 26*	oil and fat other than those mentioned in 20 01 25
20 01 27*	paint, inks, adhesives and resins containing hazardous substances
20 01 29*	detergents containing hazardous substances
20 01 31*	cytotoxic and cytostatic medicines – municipal, separately collected fractions not from healthcare or research-related sources
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
20 01 37*	wood containing hazardous substances

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements.						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1, A2 (shown as point 11 on site plan in schedule 7)	Particulate matter	Incineration exhausts gases	30 mg/m ³	½-hr average	Continuous	EN 14181
	Particulate matter		10 mg/m ³ Until 02/12/2023	daily average	Continuous	EN 14181
			5 mg/m ³ from 03/12/2023			
	Total Organic Carbon (TOC)		20 mg/m ³	½-hr average	Continuous	EN 14181
	Total Organic Carbon (TOC)		10 mg/m ³	daily average	Continuous	EN 14181
	Hydrogen chloride		60 mg/m ³	½-hr average	Continuous	EN 14181
	Hydrogen chloride		10 mg/m ³ Until 02/12/2023	daily average	Continuous	EN 14181
			8 mg/m ³ from 03/12/2023			

Table S3.1 Point source emissions to air – emission limits and monitoring requirements.						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1, A2 (shown as point 11 on site plan in schedule 7)	Hydrogen fluoride	Incineration exhausts gases	2 mg/m ³ until 02/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	CEN TS 17340
			1 mg/m ³ from 03/12/2023			
	Carbon monoxide		150 mg/m ³ 95% of all 10-minute averages in a calendar day	10-min average	Continuous	EN 14181
	Carbon monoxide		50 mg/m ³	daily average	Continuous	EN 14181
	Sulphur dioxide		200 mg/m ³	½-hr average	Continuous	EN 14181
	Sulphur dioxide		50 mg/m ³ Until 02/12/2023	daily average	Continuous	EN 14181
			40 mg/m ³ from 03/12/2023			
	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)		400 mg/m ³	½-hr average	Continuous	EN 14181
	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)		200 mg/m ³ Until 02/12/2023	daily average	Continuous	EN 14181
			180 mg/m ³ from 03/12/2023			

Table S3.1 Point source emissions to air – emission limits and monitoring requirements.						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1, A2 (shown as point 11 on site plan in schedule 7)	Cadmium & thallium and their compounds (total)	Incineration exhausts gases	0.05 mg/m ³ until 02/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	BS EN 14385
			0.02 mg/m ³ from 03/12/2023			
	Mercury and its compounds		0.05 mg/m ³ until 02/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	BS EN 13211
	Mercury and its compounds		0.02 mg/m ³ from 03/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually from 03/12/2023	BS EN 13211
			Limit does not apply if continuous monitoring has been specified by the Environment Agency		Not required if continuous monitoring has been specified by the Environment Agency	
	Mercury and its compounds		0.02 mg/m ³ from 03/12/2023	Daily average	Continuous from 03/12/2023 Not required unless continuous monitoring has been specified in writing by the Environment Agency	EN 14181

Table S3.1 Point source emissions to air – emission limits and monitoring requirements.						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1, A2 (shown as point 11 on site plan in schedule 7)	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	Incineration exhausts gases	0.5 mg/m ³ Until 02/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	BS EN 14385
			0.3 mg/m ³ from 03/12/2023			
	Exhaust gas temperature		No limit set	-	Continuous	Traceable to national standards
	Exhaust gas pressure		No limit set	-	Continuous	Traceable to national standards
	Exhaust gas flow		No limit set	-	Continuous	BS EN 16911-2
	Exhaust gas oxygen content		No limit set	-	Continuous	EN 14181
	Exhaust gas water vapour content		No limit set	-	Continuous	EN 14181
	Ammonia (NH ₃)		No limit set Until 02/12/2023	-	-	-
			15 mg/m ³ from 03/12/2023	daily average	Continuous from 03/12/2023	EN 14181
Nitrous oxide (N ₂ O)	No limit set	½-hr average and daily average	Continuous	EN 14181		

Table S3.1 Point source emissions to air – emission limits and monitoring requirements.						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1, A2 (shown as point 11 on site plan in schedule 7)	Carbon dioxide	Incineration exhausts gases	No limit set	Continuous	Continuous	EN 14181
	Dioxins / furans (I-TEQ)		0.1 ng/m ³ Until 02/12/2023	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually	EN 1948 Parts 1, 2 and 3
	Dioxins / furans (I-TEQ)		0.06 ng/m ³ and 0.08 ng/m ³ if long term limit is specified by the Environment Agency in line with sampling protocol from 03/12/2023	periodic over minimum 6 hours, maximum 8 hour period and value over sampling period of 2 to 4 weeks for long term sampling	bi-annually from 03/12/2023 and long term sampling if specified by the Environment Agency in line with sampling protocol from 03/12/2023	EN 1948 Parts 1, 2 and 3 and CEN TS 1948-5 if specified by the Environment Agency in line with sampling protocol
	Dioxin-like PCBs (WHO-TEQ Humans / Mammals, Fish, Birds)		No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually	EN 1948 Parts 1, 2 and 4
	Dioxins / furans (WHO-TEQ Humans / Mammals, Fish, Birds)		No limit set	periodic over minimum 6 hours,	Bi-annually	EN 1948 Parts 1, 2 and 3

Table S3.1 Point source emissions to air – emission limits and monitoring requirements.						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
				maximum 8 hour period		
	Polybrominated dibenzo-dioxins and furans		No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually	Method based on procedural requirements of EN 1948
	Specific individual polycyclic aromatic hydrocarbons (PAHs), as specified in Schedule 6.		No limit set	periodic over minimum 6 hours, maximum 8 hour period	Annually	BS ISO 11338 Parts 1 and 2.
A3 (shown as point 60 on site plan in schedule 7)	No parameters set	Emergency relief valve from clinical waste incinerator	No limits set	-	-	-

Table S3.1(a) Point source emissions to air during abnormal operation of incineration plant – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1, A2 (shown as point 11 on site plan in schedule 7)	Particulate matter	Incineration exhausts gases	150 mg/m ³	½-hr average	Continuous	EN 14181 or alternative surrogate as agreed in writing with the environment agency during failure of the continuous emission monitor
	Total Organic Carbon (TOC)		20 mg/m ³	½-hr average	Continuous	
	Carbon monoxide		150 mg/m ³	95% of all 10-minute averages in a calendar day	Continuous	

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 (shown on site plan in schedule 7)	Uncontaminated surface water run-off	Mineral oils and hydrocarbons	5 mg/l	-	Annually	BS EN 872:1996

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 (shown on site plan in schedule 7)	Interceptor 1, which receives drain water from the turbine house, boiler house area and ash handling area (also transfer water from interceptor 2)	No parameters set	No limit set	-	-	-

Table S3.4 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
As identified in the Application	Wind Speed and Direction	Continuous	Anemometer	
Location close to the Combustion Chamber inner wall or as identified and justified in Application.	Temperature (° C)	Continuous	Traceable to national standards	As agreed in writing with the Agency.
Incineration plant	Gross electrical efficiency	within 6 months of any modification that significantly affects energy efficiency	Performance test at full load or other method as agreed in writing with the Environment Agency	

Table S3.5 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 otherwise as agree in writing with the Environment Agency	3% or otherwise as agree in writing with the Environment Agency	Quarterly	EN 14899 and either EN 13137 or EN 15936 or otherwise as agree in writing with the Environment Agency	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'
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.		Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	
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	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	
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.		Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	

Table S3.5 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	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	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	

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

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 3.6.1.	A1, A2	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Emissions to water Parameters as required by condition 3.6.1	W1	Annually	1 Jan
TOC or otherwise as agree in writing with the Environment Agency Parameters as required by condition 3.6.1	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 3.6.1	Bottom Ash	Quarterly	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 3.6.1	Bottom Ash	Before use of a new disposal or recycling route	
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 3.6.1	APC Residues	Quarterly	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 3.6.1	APC Residues	Before use of a new disposal or recycling route	

Parameter	Units
Total Municipal Waste Incinerated	tonnes
Total Other Waste Incinerated	tonnes
Electrical energy produced	KWh
Thermal energy produced e.g. steam for export	KWh
Electrical energy exported	KWh
Electrical energy used on installation	KWh
Waste heat utilised by the installation	KWh

Parameter	Frequency of assessment	Units
Annual Report as required by condition 4.2.2	Annually	-
Electrical energy exported, imported and used at the installation	Annually	KWh / tonne of waste incinerated
Fuel oil consumption	Annually	Kg / tonne of waste incinerated
Bottom Ash residue	Annually	Route, tonnes and tonnes / tonne of waste incinerated
APC residue	Annually	Route, tonnes and tonnes / tonne of waste incinerated
Urea consumption	Annually	Kg / tonne of waste incinerated
Activated Carbon consumption	Annually	Kg / tonne of waste incinerated
Lime consumption	Annually	Kg / tonne of waste incinerated
Water consumption	Annually	Kg / tonne of waste incinerated
Periods of abnormal operation	Annually	No of occasions and cumulative hours for current calendar year for each line.

Media/parameter	Reporting format	Date of form
Annual report required by condition 4.2.2	Annual performance report template	04/11/2005
Emissions to air until 02/12/2023	Agency form / WP3239SJ/ PER/ A1 and WP3239SJ/ PER/ A2 Agency form / WP3239SJ/ PM/ A1 and WP3239SJ/ PM/ A2	04/11/2005

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
	Agency form / WP3239SJ/ TOC/ A1 and WP3239SJ/ TOC/ A2 Agency form / WP3239SJ/ HCL/ A1 and WP3239SJ/ HCL/ A2 Agency form / WP3239SJ/ CO/ A1 and WP3239SJ/ CO/ A2 Agency form / WP3239SJ/ SO2/ A1 and WP3239SJ/ SO2/ A2 Agency form / WP3239SJ/ NOx/ A1 and WP3239SJ/ NOx/ A2	
Emissions to air from 03/12/2023	Forms air 1-9 or other forms as agreed in writing by the Environment Agency	DD/MM/YY
Water: Annual periodic monitored emissions to water	Agency Form / WP3239SJ / W1	04/11/2005
Residue quality	Form residue 1 and 2 or other form as agreed in writing by the Environment Agency	04/11/2005

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	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
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 breach of permit conditions not related to limits	
To be notified within 24 hours of detection	
Condition breached	
Date, time and duration of breach	
Details of the permit breach i.e. what happened including impacts observed.	
Measures taken, or intended to be taken, to restore permit compliance.	

(d) 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.

“abnormal operation” means: any technically unavoidable stoppages, disturbances, or failures of the plant or the measurement devices. Abnormal operation starts as defined in condition 2.3.15 and ends as defined in condition 2.3.16. Abnormal operation is limited to 4 hours for a single occurrence and a total of 60 hours per year per line.

“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.

“BAT conclusions” means Commission Implementing Decision (EU) 2019/2010 of 12 November 2019 establishing the best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for Waste Incineration

“bottom ash” means ash from the third hearth of the primary chamber which has been through the ash box system and has been deposited in the ash skip as described in the application.

“building” is a covered structure enclosed on all vertical sides that provides sheltered cover and contains emissions of, for example, noise, particulate matter, odour and litter.

“CEM” Continuous emission monitor

“CEN” means Comité Européen de Normalisation

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

“clinical” waste means waste from a healthcare activity (including veterinary healthcare) that:

- a) contains viable micro-organisms or their toxins which are known or reliably believed to cause disease in humans or other living organisms
- b) contains or is contaminated with a medicine that contains a biologically active pharmaceutical agent
- c) is a sharp, or a body fluid or other biological material (including human and animal tissue) containing or contaminated with a hazardous substance

and waste of a similar nature from a non-healthcare activity.

“container” is a receptacle for waste for example bags, bins, boxes, drums, IBCs and blister packs. Wastes may be packaged in more than one receptacle for example a bag in a box.

“cytotoxic and cytostatic medicines” are medicinal products that possess one or more of the hazardous properties acutely toxic, carcinogenic, mutagenic or toxic for reproduction.

“D” means a disposal operation provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on Waste.

Daily average emissions value means ‘the average of at least 43 valid half hourly averages or for CO the average of at least 43 valid half hourly averages or 129 valid 10 min averages’

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

“disposal”. Means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 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 in Annex III of the Waste Framework Directive

“hazardous substance” means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008.

‘Hazardous waste’ has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended)

“healthcare waste” means waste produced during human or animal healthcare, or related research activities. It covers both clinical and offensive waste. Wastes produced by healthcare in the community, and similar types of waste produced by non-healthcare activities are included, for example:

- cosmetic body piercing and body art
- non-medicinal procedures in the hair and beauty sector
- substance abuse
- crime scene clean-up.

“impermeable surface” means a surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the pavement surface.

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

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

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

“ISO” means International Standards Organisation.

‘List of Wastes’ means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time

“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.

“medicines” are “medicinal products” as defined in Regulation 130 of Part VIII of the Medicines Act 1968. Waste medicines (or pharmaceutical waste) include:

- expired, unused, spilt and contaminated medical products that are no longer required and need to be disposed of appropriately;
- discarded items contaminated with medicines such as bottles or boxes with residues, gloves, masks, connecting tubing, syringe bodies and drug vials.

“mixing of hazardous waste” means mixing hazardous waste as defined by Regulation 18 of the Hazardous Waste (England and Wales) Regulations 2005.

“offensive waste” is waste that:

- is not clinical waste
- contains body fluids, secretions or excretions
- falls within waste codes 18 01 04, 18 02 03 or 20 01 99.

“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 the table below.

“Pests” means Birds, Vermin and Insects.

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

“R” means a recovery operation provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on Waste.

“recovery” means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“repackaging” is:

- taking a waste package for example a bag, drum or box out of one cart or bulk container for example, skip and placing it into another cart or bulk container for example, skip
- taking a waste package from a cart or bulk container for example, skip and placing it onto a pallet or vehicle
- taking a waste package from a pallet and placing it into a cart or bulk container for example, skip
- transferring, removing or separating waste from its primary packaging into another container

“sealed container” for the purposes of this permit, means a container which is fully enclosed, weather proof, does not allow any solid or liquid content to escape and is lockable.

“sealed drainage” in relation to an impermeable surface means a drainage system with impermeable components which does not leak and which will ensure that:

- no liquid will run off the surface otherwise than via the system
- except where they may lawfully be discharged to foul sewer, all liquids entering the system are collected in a sealed sump

“sharps” means items that could cause cuts or puncture wounds. They include needles, hypodermic needles, scalpels and other blades, knives, infusion sets, saws, broken glass, and nails.

“start up” is any period, where the plant has been non-operational, until waste has been fed to the plant in a sufficient quantity to initiate steady-state conditions as described in the application or as agreed in writing with the Environment Agency.

“shut down” is any period where the plant is being returned to a non-operational state as described in the application or as agreed in writing with the Environment Agency.

“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 and in relation to hazardous waste, includes the asterisk

“Waste Framework Directive” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste

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 emissions 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, 6% dry for solid fuels; and/or
- (b) in relation to emissions 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
- (c) 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,
- (d) where hazardous wastes are burned in plant covered by Schedule 13 of Environmental Permitting Regulations and the emissions of pollutants are reduced by gas treatment, standardisation of the gas with respect to oxygen content shall be carried out only if the oxygen concentration measured over the same period exceeds the relevant oxygen content defined in conditions (a) – (c) above. In other cases, the measured emissions shall be standardised only for moisture, pressure and temperature.

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. However the minimum value should be used when assessing compliance with the emission limit value in table S3.1.

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

TEF schemes for dioxins and furans				
Congener	I-TEF	WHO-TEF		
	1990	2005	1997/8	
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

“year” means calendar year ending 31 December.

When the following terms appear in the waste code list in Schedule 2, table 2.2, S2.3 and S2.4, for those tables, they have the meaning given below:

‘hazardous substance’ means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008

‘heavy metal’ means any compound of antimony, arsenic, cadmium, chromium (VI), copper, lead, mercury, nickel, selenium, tellurium, thallium and tin, as well as these materials in metallic form, as far as these are classified as hazardous substances

‘PCBs’ means

- polychlorinated biphenyls
- polychlorinated terphenyls

- monomethyl-tetrachlorodiphenyl methane, Monomethyl-dichloro-diphenyl methane, Monomethyldibromo-diphenyl methane
- any mixture containing any of the above mentioned substances in a total of more than 0,005 %by weight

'transition metals' means any of the following metals: any compound of scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum, as well as these materials in metallic form, as far as these are classified as hazardous substances

'stabilisation' means processes which change the hazardousness of the constituents in the waste and transform hazardous waste into non-hazardous waste

'solidification' means processes which only change the physical state of the waste by using additives without changing the chemical properties of the waste

'partly stabilised wastes' means wastes containing, after the stabilisation process, hazardous constituents which have not been changed completely into non-hazardous constituents and could be released into the environment in the short, middle or long term.

Schedule 7 – Site plan

