

Draft Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Fine Environmental Services Limited

Fine Environmental Services Seal Sands Facility Seal Sands Road Middlesbrough TS2 1UB

Variation application number

EPR/ZP3438CF/V003

Permit number

EPR/ZP3438CF

Fine Environmental Services Seal Sands Facility Permit number EPR/ZP3438CF

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

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

The main features of the permit are as follows:

Furnace technology	Staged air thermal oxidiser
Number of lines	1
Principal waste type	hazardous waste
Stack height	90 m
Permitted plant capacity	48,000 tonnes per year

The incineration plant burns hazardous liquid wastes from the adjacent chemical plant and wastes received from other sources. The incineration plant and chemical plant are a single installation; the permit authorises the incineration plant.

The furnace is an induced draught, down-fired, staged air thermal oxidiser. It is designed and operated to burn hazardous liquid wastes. The plant has an advance control system to ensure good combustion conditions. Rapid flue-gas cooling minimises the re-formation of dioxins. Emissions are abated using an electrostatic precipitator and a wet scrubber and emitted to air via a 90 m high stack.

There are emissions to water from the wet scrubber to water and/or sewer.

Emissions are monitored in line with the BAT conclusions and IED.

The operator has an environmental management system.

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	
Permit issued (EPR/BV5971IG)	28/05/2004		
Variation issued (EPR/BV5971IG/V002)	18/02/2005		
Variation issued (EPR/BV5971IG/V003)	01/08/2005		
Variation issued (EPR/BV5971IG/V004)	14/12/2005	Update to meet WID requirements	
Variation issued (EPR/BV5971IG/V005)	21/05/2007		
Transfer (EPR/PP3439GG/T001)	24/10/2008		
Variations (EPR/PP3439GG/V002, V003, V004, V005)	13/12/2012 29/05/2013 02/04/2015 17/04/2018		
Partial transfer application (EPR/ZP3438CF/T001)	18/10/2012	Transfer of incineration activity to Fine Environmental Services Limited	
Partial transfer issued (EPR/ZP3438CF/T001)	13/12/2012		
Variation and consolidation application EPR/ZP3438CF/V002	Duly made 18/12/12	Application to allow the importation of third party wastes.	
Further information received	22/02/13	Changes are in respect to the use of conductivity meters as means of determining the presence of water layers in the organic feed tanks and the addition of a condenser D403. Revised Installation boundary to include the tanker discharge area. Revised Process Flow Diagram.	
Schedule 5 notice dated 26/02/2013	21/03/13		
Variation and consolidation EPR/ZP3438CF/V002 determined	24/04/13	Varied and consolidated permit issued in modern condition format.	
Regulation 61 notice issued	08/07/22	Regulation 61 Notice requiring information for Statutory review of permit. BAT Conclusions published 03 December 2019.	
Regulation 61 notice response	04/01/23,27/01/23, 04/04/23,25/05/23, 23/06/23,25/07/23, 13/10/23,24/11/23, 27/11/23	Reg 61 notice main response. Derogation and follow up clarifications	

Status log of the permit		
Description	Date	Comments
Variation issued EPR/ZP3438CF/V003	dd/mm/yy	

Other Part A installation permits relating to this installation		
Operator	Permit number	Date of issue
Fine Organics Limited	EPR/PP3439GG	28/05/04

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/ZP3438CF

Issued to

Fine Environmental Services Limited ("the operator")

whose registered office is

Seal Sands Middlesbrough Cleveland TS2 1UB

company registration number 07182855

to operate part of a regulated facility at

Fine Environmental Services Seal Sands Facility Seal Sands Road Middlesbrough TS2 1UB

to the extent set out in the schedules.

The notice shall take effect from [DD/MM/YYYY]

Name	Date
[job title of authorised person]	[DD/MM/YYYY]

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/ZP3438CF

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/ZP3438CF/V003 authorising,

Fine Environmental Services Limited ("the operator"),

whose registered office is/whose principal office is

Seal Sands Middlesbrough Cleveland TS2 1UB

company registration number 07182855

to operate part of an installation at

Fine Environmental Services Seal Sands Facility Seal Sands Road Middlesbrough TS2 1UB

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

Name	Date
[job title of authorised person]	[DD/MM/YYYY]

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), 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 provide and maintain steam and/or hot water pass-outs such that opportunities for the further use of waste heat may be capitalised upon should they become practicable.
- 1.2.3 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.

1.5 Multiple operator installations

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

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, which is within the area edged in green on the site plan that represents the extent of the installation covered by this permit and that of the other operator of the installation.

2.3 Operating techniques

- 2.3.1 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 table \$2.2; 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 table S2.2 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 or other temperature as agreed in writing with the Environment Agency.
- (c) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded during abnormal operation; or
- (d) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than during abnormal operation; or
- (e) 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
- (f) there is a stoppage, disturbance or failure of the activated carbon abatement system, other than during abnormal operation.
- (g) 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 Bottom ash and APC residues shall not be mixed.

2.4 Improvement programme

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

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

2.5 Pre-operational conditions

2.5.1 The operations specified in schedule 1 table S1.4 shall not commence until the measures specified in that table have been completed.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, 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 S3.5. 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 & NO ₂ expressed as NO ₂)	20%
•	Particulate matter	30%
•	Total organic carbon (TOC)	30%
•	Hydrogen chloride	40%
•	Ammonia	40%
•	Mercury	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:
 - (i) 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 \$3.5.
- 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, S3.3 unless otherwise agreed in writing by the Environment Agency.

3.7 Fire prevention

- 3.7.1 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.
- 3.7.2 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.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

(a) any change in the operator's name or address; and

- (b) any steps taken with a view to the dissolution of the operator.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
 - (a) the Environment Agency shall be notified at least 14 days before making the change; and
 - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately" or "without delay" 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 (a)	The incineration of hazardous waste in a waste incineration plant with a capacity of 10 tonnes per day or more.	From receipt of waste to emission of exhaust gas and removal from site of waste arising. The total amount of waste stored on site at any one time, including both hazardous and non-hazardous waste, shall not exceed 310 m³. Waste shall be stored on impermeable surfacing with sealed drainage. Waste shall not be stored in vehicles or vehicle trailers, unless they are being received for immediate offloading. All wastes shall be stored on site for no longer than 6 months. 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. No waste types shall be submitted
			to this activity other than those wastes specified in Schedule 2, Table S2.2.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to questions 2.1 and 2.2 given in the application documents as follows:	Duly Made Date 05/09/03
	Sections 2.1 and 2.2 of Volume 1 on pages 6-53;	
	Volume 3 (except Section "Impact Assessment using H1 Software in Appendix 3E, which is excluded);	
	The Multi Product Protocol [MPP] in Appendix 9 of Volume 5, as amended	

Description	Parts	Date Received
Response to request for information	Letter outlining Wastes incinerated on site and the European Waste Catalogue Numbers along with annual capacity of the incinerator for incorporation in Table 2.1.2 and Schedule 6 of the Permit	10/11/05
Further information	Letter received giving throughput, calorific values and waste compositions.	06/12/05
Further information	Letter received giving temperature measurement location, waste composition, water vapour measurement provided.	06/12/05
Variation application	Parts C2 and C3 and the supplementary information supplied with these parts.	Duly Made Date 18/12/12
Further information	Letter received referencing changes to paragraphs 2.3.1 and 2.3.3 of the application, revised site installation boundary and revised Process Flow Diagram Drawing No. Incinerator 2012 PFD Rev C2.	22/02/13
Chemical waste: appropriate measures for permitted facilities Version published 18 November 2020	Other than: those parts to which an improvement programme requirement applies in Table \$1.3 (and only until the date that the improvement has been or must be met, whichever is the earlier.) those parts to which a pre-operational condition applies in table \$1.4 (and only until the pre-operational condition has been met) those parts listed below which are not applicable; those parts for which an alternative measure has been proposed below. all of the following parts of the appropriate measures guidance shall apply: Waste pre-acceptance, acceptance and waste tracking appropriate measures Waste storage, segregation and handling appropriate measures – measure The following parts of the appropriate measures guidance are not applicable: those which relate to laboratory smalls in containers less than 5 litres, asbestos and aerosols, which the site do not store or treat the following tests on liquid wastes (ash content, inhibition of biological treatment, cyanide testing) the following tests on solid wastes (content of volatile and semi-volatile substances) testing of fractions of multiphase wastes those relating to Wheeled containers, skips or racking system which the site do not use the use of overflow pipes and rotary pumps which the	

Table S1.2 Operating techniques		
Description	Parts	Date Received
Response to regulation 61 notice	Operating techniques as set out in the response to the regulation 61 notice.	27/01/2023 and 04/04/2023.

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	 Incineration BAT Conclusion 29 derogation The operator shall submit, for approval by Environment Agency, reports setting out progress to achieving the BAT AEL of 180 mg/m³ daily average. The reports shall include, but not necessarily be limited to, the following: Results from the trail of operating the furnace at a lower temperature, including emissions data compared to permit emission limits. Progress in achieving the BAT AEL compared to the plan set out in the derogation application. Any changes to the proposed timeline of achieving BAT. A commissioning plan for installing selective non catalytic reduction (SNCR) A report on the commissioning of the SNCR system 	Progress report by 30/06/2024 then at six monthly intervals until compliance is reached, which shall be no later than 03 December 2026
IC2	The operator shall submit a report to the Environment Agency 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.	31/03/24
IC3	The operator shall submit a waste pre-acceptance, acceptance and waste tracking plan to the Environment Agency for approval. The plan shall have regards to the Chemical waste: appropriate measures for permitted facilities guidance and BAT 9 of the BAT conclusions.	6 months from issue of variation notice
IC4	 The operator shall carry out the following assessments for the discharge to sewer (emission point S1) for emissions of ammonia, fluoride, iron, tin and vanadium: screening tests for any relevant specific substance with Environmental Quality Standards (EQSs) screening tests for any relevant priority hazardous substances. modelling for any substance that does not screen out by the above screening tests. The screening assessments and modelling shall be based on results from emissions monitoring. The emissions monitoring shall be carried out using 	12 months from issue of variation notice

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	the methods and standards described in Environment Agency guidance M18 guidance on 'Monitoring of discharges to water and sewer'. A minimum of 12 samples is required which must be taken over a sufficient time period to ensure that the results are representative (allowing for any fluctuations in effluent composition, particularly due to incineration of different waste types).	
	The operator shall submit a report, and obtain the Environment Agency's written approval of the report, that shall include: • details of the screening tests • details of the modelling if carried out	
	details of the emissions monitoring	
IC5	The operator shall install continuous monitoring for mercury and submit a report to the Environment Agency for approval on its implementation.	12 months from issue of variation notice

Table S1.4 Pre-operational measures for future development		
Reference	Operation	Pre-operational measures
PO1	Receipt of packaged wastes. Packaged wastes are defined as any wastes received in drums, bags, boxes or IBCs.	 The operator shall submit the following in writing to the Environment Agency for approval: Confirm that a computerised tracking system is in place Information on how the following sections of the chemical waste appropriate measures guidance will be complied with: 4.15, 4.16, 4.20, 4.22, 4.23, 4.28, 4.70, 4.86, 4.88
PO2	Emission of waste water from cleaning of exhaust gases via emission point W1	 The operator shall carry out the following assessments for the discharge to water from emission point W1: screening tests for any relevant specific substance with Environmental Quality Standards (EQSs) in line with Environment Agency guidance 'Surface water pollution risk assessment for your environmental permit' screening tests for any relevant priority hazardous substances. modelling for any substance that does not screen out by the above screening tests. The modelling shall be in accordance with Environment Agency guidance 'Modelling: surface water pollution risk assessment risk assessment' A full list of specific substances and priority hazardous substances is provided in our guidance 'Surface water pollution risk assessment for your environmental permit'. You should review the list and carry out the screening for any specific substance and priority hazardous substance that you think may

Table S1.4 Pre-operational measures for future development		
Reference	Operation	Pre-operational measures
		be present in your discharge. You must also provide a brief justification for each substance from the relevant lists that you have not included in the test (which can be presented via a table or spreadsheet). Reasons for not including could be that the substance cannot be present in the input waste or formed by the incineration process, or that the substance could be present in the input waste but the incineration process will completely destroy it.
		The screening assessments and modelling shall be based on results from emissions monitoring. The emissions monitoring shall be carried out using the methods and standards described in Environment Agency guidance M18 guidance on 'Monitoring of discharges to water and sewer'. A minimum of 12 samples is required which must be taken over a sufficient time period to ensure that the results are representative (allowing for any fluctuations in effluent composition, particularly due to incineration of different waste types). The monitoring can be based on historic monitoring provided it meets these requirements; otherwise you will need to carry out new monitoring
		The operator shall submit a report to the Environment Agency for approval on the screening, monitoring and the modelling that was carried out. The report shall include but not necessarily be limited to:
		 Result of emissions monitoring that has been carried out including a description of how the monitoring was carried out Results of the screening assessment
		A report of modelling that has been carried out including the method used and results from the modelling.

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
-	-

Table S2.2 Permitte	d waste types and quantities for incineration plant
Maximum quantity	48,000 tonnes per year For hazardous wastes listed in table S2.2 - Calorific values and pollutant composition ranges as specified in the application Wastes that contain firefighting foam that contains PFAS shall not be accepted
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 08*	agrochemical waste containing hazardous substances
02 01 09	agrochemical waste other than those mentioned in 02 01 08
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 03	wastes from solvent extraction
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
02 07 02	wastes from spirits distillation
02 07 03	wastes from chemical treatment
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 02	wastes from wood preservation
03 02 01*	non-halogenated organic wood preservatives
03 02 02*	organochlorinated wood preservatives
03 02 03*	organometallic wood preservatives
03 02 04*	inorganic wood preservatives
03 02 05*	other wood preservatives containing hazardous substances
04	Wastes from the leather, fur and textile industries
04 01	wastes from the leather and fur industry
04 01 05	tanning liquor free of chromium
04 02	wastes from the textile industry
04 02 10	organic matter from natural products (for example grease, wax)

Table S2.2 Permitte	d waste types and quantities for incineration plant
Maximum quantity	48,000 tonnes per year For hazardous wastes listed in table S2.2 - Calorific values and pollutant composition ranges as specified in the application
	Wastes that contain firefighting foam that contains PFAS shall not be accepted
Waste code	Description
04 02 14*	wastes from finishing containing organic solvents
04 02 16*	dyestuffs and pigments containing hazardous substances
04 02 17	dyestuffs and pigments other than those mentioned in 04 02 16
05	Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal
05 01	wastes from petroleum refining
05 01 03*	tank bottom sludges
05 01 05*	oil spills
05 01 07*	acid tars
05 01 08*	other tars
05 01 11*	wastes from cleaning of fuels with bases
05 01 12*	oil containing acids
05 01 16	sulphur-containing wastes from petroleum desulphurisation
05 06	wastes from the pyrolytic treatment of coal
05 06 01*	acid tars
05 06 03*	other tars
05 07	wastes from natural gas purification and transportation
05 07 02	wastes containing sulphur
06	Wastes from inorganic chemical processes
06 08	wastes from the MFSU of silicon and silicon derivatives
06 08 02*	waste containing hazardous chlorosilanes
06 10	wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture
06 10 02*	wastes containing hazardous substances
06 13	wastes from inorganic chemical processes not otherwise specified
06 13 01*	inorganic plant protection products, wood-preserving agents and other biocides
07	Wastes from organic chemical processes
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
07 01 01*	aqueous washing liquids and mother liquors
07 01 03*	organic halogenated solvents, washing liquids and mother liquors
07 01 04*	other organic solvents, washing liquids and mother liquors
07 01 07*	halogenated still bottoms and reaction residues
07 01 08*	other still bottoms and reaction residues
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres

d waste types and quantities for incineration plant
48,000 tonnes per year For hazardous wastes listed in table S2.2 - Calorific values and pollutant composition ranges as specified in the application
Wastes that contain firefighting foam that contains PFAS shall not be accepted
Description
aqueous washing liquids and mother liquors
organic halogenated solvents, washing liquids and mother liquors
other organic solvents, washing liquids and mother liquors
halogenated still bottoms and reaction residues
other still bottoms and reaction residues
wastes from additives containing hazardous substances
wastes from additives other than those mentioned in 07 02 14
waste containing hazardous silicones
waste containing silicones other than those mentioned in 07 02 16
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
aqueous washing liquids and mother liquors
organic halogenated solvents, washing liquids and mother liquors
other organic solvents, washing liquids and mother liquors
halogenated still bottoms and reaction residues
other still bottoms and reaction residues
wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
aqueous washing liquids and mother liquors
organic halogenated solvents, washing liquids and mother liquors
other organic solvents, washing liquids and mother liquors
halogenated still bottoms and reaction residues
other still bottoms and reaction residues
wastes from the MFSU of fine chemicals and chemical products not otherwise specified
aqueous washing liquids and mother liquors
organic halogenated solvents, washing liquids and mother liquors
other organic solvents, washing liquids and mother liquors
halogenated still bottoms and reaction residues
other still bottoms and reaction residues
Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks
wastes from MFSU and removal of paint and varnish
waste paint and varnish containing organic solvents or other hazardous substances
waste paint and varnish other than those mentioned in 08 01 11

Maximum quantity	48,000 tonnes per year For hazardous wastes listed in table S2.2 - Calorific values and pollutant composition ranges as specified in the application Wastes that contain firefighting foam that contains PFAS shall not be accepted
Waste code	Description
08 01 17*	wastes from paint or varnish removal containing organic solvents or other hazardous substances
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17
08 01 19*	aqueous suspensions containing paint or varnish containing organic solvents or other hazardous substances
08 01 20	aqueous suspensions containing paint or varnish other than those mentioned in 08 01 19
08 01 21*	waste paint or varnish remover
08 03	wastes from MFSU of printing inks
08 03 08	aqueous liquid waste containing ink
08 03 12*	waste ink containing hazardous substances
08 03 13	waste ink other than those mentioned in 08 03 12
08 03 17*	waste printing toner containing hazardous substances
08 04	wastes from MFSU of adhesives and sealants (including water proofing products)
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09
08 04 15*	aqueous liquid waste containing adhesives or sealants containing organic solvents or other hazardous substances
08 04 16	aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15
08 04 17*	rosin oil
08 05	wastes not otherwise specified in 08
08 05 01*	waste isocyanates
09 01	wastes from the photographic industry
09 01 01*	water-based developer and activator solutions
09 01 02*	water-based offset plate developer solutions
09 01 03*	solvent-based developer solutions
09 01 04*	fixer solutions
10	Wastes from thermal processes
10 02	wastes from the iron and steel industry
10 02 11*	wastes from cooling-water treatment containing oil
11	Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy
11 01	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)

Table S2.2 Permitted waste types and quantities for incineration plant		
Maximum quantity	48,000 tonnes per year For hazardous wastes listed in table S2.2 - Calorific values and pollutant composition ranges as specified in the application Wastes that contain firefighting foam that contains PFAS shall not be accepted	
Waste code	Description	
11 01 11*	aqueous rinsing liquids containing hazardous substances	
11 01 12	aqueous rinsing liquids other than those mentioned in 11 01 11	
11 01 13*	degreasing wastes containing hazardous substances	
11 01 14	degreasing wastes other than those mentioned in 11 01 13	
11 03	sludges and solids from tempering processes	
11 03 01*	wastes containing cyanide	
12	Wastes from shaping and physical and mechanical surface treatment of metals and plastics	
12 01	wastes from shaping and physical and mechanical surface treatment of metals and plastics	
12 01 06*	mineral-based machining oils containing halogens (except emulsions and solutions)	
12 01 07*	mineral-based machining oils free of halogens (except emulsions and solutions)	
12 01 08*	machining emulsions and solutions containing halogens	
12 01 09*	machining emulsions and solutions free of halogens	
12 01 10*	synthetic machining oils	
12 01 12*	spent waxes and fats	
12 01 19*	readily biodegradable machining oil	
12 03	wastes from water and steam degreasing processes (except 11)	
12 03 01*	aqueous washing liquids	
12 03 02*	steam degreasing wastes	
13	Oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19)	
13 01	waste hydraulic oils	
13 01 01*	hydraulic oils, containing PCBs	
13 01 04*	chlorinated emulsions	
13 01 05*	non-chlorinated emulsions	
13 01 09*	mineral-based chlorinated hydraulic oils	
13 01 10*	mineral based non-chlorinated hydraulic oils	
13 01 11*	synthetic hydraulic oils	
13 01 12*	readily biodegradable hydraulic oils	
13 01 13*	other hydraulic oils	
13 02	waste engine, gear and lubricating oils	
13 02 04*	mineral-based chlorinated engine, gear and lubricating oils	
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils	
13 02 06*	synthetic engine, gear and lubricating oils	

Table S2.2 Permitted waste types and quantities for incineration plant		
Maximum quantity	48,000 tonnes per year For hazardous wastes listed in table S2.2 - Calorific values and pollutant composition ranges as specified in the application Wastes that contain firefighting foam that contains PFAS shall not be accepted	
Waste code	Description	
13 02 07*	readily biodegradable engine, gear and lubricating oils	
13 02 08*	other engine, gear and lubricating oils	
13 03	waste insulating and heat transmission oils	
13 03 01*	insulating or heat transmission oils containing PCBs	
13 03 06*	mineral-based chlorinated insulating and heat transmission oils other than those mentioned in 13 03 01	
13 03 07*	mineral-based non-chlorinated insulating and heat transmission oils	
13 03 08*	synthetic insulating and heat transmission oils	
13 03 09*	readily biodegradable insulating and heat transmission oils	
13 03 10*	other insulating and heat transmission oils	
13 04	bilge oils	
13 04 01*	bilge oils from inland navigation	
13 04 02*	bilge oils from jetty sewers	
13 04 03*	bilge oils from other navigation	
13 05	oil/water separator contents	
13 05 06*	oil from oil/water separators	
13 05 07*	oily water from oil/water separators	
13 07	wastes of liquid fuels	
13 07 01*	fuel oil and diesel	
13 07 02*	petrol	
13 07 03*	other fuels (including mixtures)	
13 08	oil wastes not otherwise specified	
13 08 01*	desalter sludges or emulsions	
14	Waste organic solvents, refrigerants and propellants (except 07 and 08)	
14 06	waste organic solvents, refrigerants and foam/aerosol propellants	
14 06 01*	chlorofluorocarbons, HCFC, HFC	
14 06 02*	other halogenated solvents and solvent mixtures	
14 06 03*	other solvents and solvent mixtures	
16	Wastes not otherwise specified in the list	
16 01	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)	
16 01 13*	brake fluids	
16 01 14*	antifreeze fluids containing hazardous substances	
16 01 15	antifreeze fluids other than those mentioned in 16 01 14	

Table S2.2 Permitte	d waste types and quantities for incineration plant
Maximum quantity	48,000 tonnes per year For hazardous wastes listed in table S2.2 - Calorific values and pollutant composition ranges as specified in the application
	Wastes that contain firefighting foam that contains PFAS shall not be accepted
Waste code	Description
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 03 06	organic wastes other than those mentioned in 16 03 05
16 05	gases in pressure containers and discarded chemicals
16 05 06*	laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals
16 05 08*	discarded organic chemicals consisting of or containing hazardous substances
16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08
16 07	wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)
16 07 08*	wastes containing oil
16 07 09*	wastes containing other hazardous substances
16 08	spent catalysts
16 08 06*	spent liquids used as catalysts
16 09	oxidising substances
16 09 03*	peroxides, for example hydrogen peroxide
16 09 04*	oxidising substances, not otherwise specified
16 10	aqueous liquid wastes destined for off-site treatment
16 10 01*	aqueous liquid wastes containing hazardous substances
16 10 02	aqueous liquid wastes other than those mentioned in 16 10 01
16 10 03*	aqueous concentrates containing hazardous substances
16 10 04	aqueous concentrates other than those mentioned in 16 10 03
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 01	wastes from incineration or pyrolysis of waste
19 01 06*	aqueous liquid wastes from gas treatment and other aqueous liquid wastes
19 01 17*	pyrolysis wastes containing hazardous substances
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17
19 02	wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 04*	premixed wastes composed of at least one hazardous waste
19 02 07*	oil and concentrates from separation
19 02 08*	liquid combustible wastes containing hazardous substances

Table 52.2 Permitte	d waste types and quantities for incineration plant
Maximum quantity	48,000 tonnes per year For hazardous wastes listed in table S2.2 - Calorific values and pollutant composition ranges as specified in the application
	Wastes that contain firefighting foam that contains PFAS shall not be accepted
Waste code	Description
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 02 11*	other wastes containing hazardous substances
19 03	stabilised/solidified wastes
19 03 04*	wastes marked as hazardous, partly stabilised other than 19 03 08
19 03 05	stabilised wastes other than those mentioned in 19 03 04
19 04	vitrified waste and wastes from vitrification
19 04 04	aqueous liquid wastes from vitrified waste tempering
19 07	landfill leachate
19 07 02*	landfill leachate containing hazardous substances
19 07 03	landfill leachate other than those mentioned in 19 07 02
19 08	wastes from waste water treatment plants not otherwise specified
19 08 08*	membrane system waste containing heavy metals
19 08 09	grease and oil mixture from oil/water separation containing only edible oil and fats
19 11	wastes from oil regeneration
19 11 02*	acid tars
19 11 03*	aqueous liquid wastes
19 13	wastes from soil and groundwater remediation
19 13 07*	aqueous liquid wastes and aqueous concentrates from groundwater remediation containing hazardous substances
19 13 08	aqueous liquid wastes and aqueous concentrates from groundwater remediation other than those mentioned in 19 13 07

Schedule 3 – Emissions and monitoring

Table S3.1 P	oint source emissions to	air - emission	limits and monitor	ing requirements.			
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)	
A1 (point A3/1 on Drawing No.	Particulate matter	Incineration exhausts gases	30 mg/m ³	½-hr average	Continuous	EN 14181	
Incinerator 2012 PFD Rev C2)	Particulate matter		7 mg/m ³	daily average	Continuous	EN 14181	
	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			8 mg/m ³	daily average	Continuous	EN 14181
	Hydrogen fluoride		1 mg/m³	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	CEN TS 17340	
	Carbon monoxide		100 mg/m ³	½-hr average	Continuous	EN 14181	

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1 (point A3/1 on	Carbon monoxide	Incineration exhausts gases	50 mg/m ³	daily average	Continuous	EN 14181
Drawing No. Incinerator 2012 PFD	Sulphur dioxide		200 mg/m ³	½-hr average	Continuous	EN 14181
Rev C2)	Sulphur dioxide		40 mg/m ³	daily average	Continuous	EN 14181
	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)		360 mg/m ³ until 02/12/2026	daily average	Continuous	EN 14181
			180 mg/m3 from 03/12/2026		>	
	Cadmium & thallium and their compounds (total)		0.02 mg/m ³	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	BS EN 14385

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1 (point A3/1 on Drawing No. Incinerator 2012 PFD Rev C2)	Mercury and its compounds	Incineration exhausts gases	0.02 mg/m³ Limit does not apply after completion of improvement condition IC5	Average of three consecutive measurements of at least 30 minutes each	Bi-annually Monitoring not required after completion of improvement condition IC5	BS EN 13211
	Mercury and its compounds		0.02 mg/m³ Limit applies after completion of improvement condition IC5	Daily average	Continuous monitoring applies after completion of improvement condition IC5	EN 14181
	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)		0.3 mg/m ³	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	BS EN 14385
	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

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1 (point A3/1 on Drawing No.	Exhaust gas oxygen content	Incineration exhausts gases	No limit set		Continuous	EN 14181
Incinerator 2012 PFD Rev C2)	Exhaust gas water vapour content		No limit set		Continuous	EN 14181
	Ammonia (NH ₃)		10 mg/m³ limit does not apply where SNCR is not installed	daily average	Continuous Monitoring is not required where SNCR is not installed	EN 14181
	Nitrous oxide (N ₂ O)		No limit set	½-hr average and daily average	Continuous monitoring is not required where SNCR is not installed	EN 14181
	Carbon dioxide		No limit set	Continuous	Continuous	EN 14181

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1 (point A3/1 on Drawing No. Incinerator 2012 PFD	Dioxins / furans (I-TEQ)	Incineration exhausts gases	0.06 ng/m ³	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually	EN 1948 Parts 1, 2 and 3
Rev C2)		Incineration	and	and	and	and
		exhausts gases	0.08 ng/m³ if long term limit is specified by the Environment Agency in line with sampling protocol	value over sampling period of 2 to 4 weeks for long term sampling	long term sampling if specified by the Environment Agency in line with sampling protocol	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, maximum 8 hour period	Bi-annually	BS EN 1948 Parts 1, 2 and 3

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
	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
A1 (point A3/1 on Drawing No. Incinerator 2012 PFD Rev C2)	Specific individual polycyclic aromatic hydrocarbons (PAHs), as specified in Schedule 6.	Incineration exhausts gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Annually	BS ISO 11338 Parts 1 and 2.

Table S3.1(a) F	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 (point A3/1 on Drawing No. Incinerator	Particulate matter	Incineration exhausts gases	150 mg/m ³	½-hr average	Continuous	EN 14181		
2012 PFD Rev C2)	Total Organic Carbon (TOC)		20 mg/m ³	½-hr average	Continuous	alternative surrogate as agreed in writing with the environment agency during failure of the continuous emission monitor		
,	Carbon monoxide		100 mg/m ³	1/2-hr average	Continuous			

Table S3.1(a)	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		



Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 on Drawing No. Incinerato	Waste water from treatment of exhaust	рН	5-9	Representative composite sample from each batch	Each batch prior to discharge	Calibrated pH Meter
r 2012 PFD Rev	gases		-	-	Continuous	
C2 (final discharge Tees		Suspended solids	30.0 mg/l	Representative flow	Daily	BS EN 872
Estuary at Grid		Total organic carbon	40 mg/l	proportional 24- hour composite of batch	Monthly	BS EN 1484
Reference NZ 5440		Arsenic and	0.05 mg/l	discharges		BS EN ISO 1188
2485)		its compounds expressed as arsenic (As)				5, BS EN ISO 1729 4-2 or BS EN ISO 1558 6
		Cadmium and its compounds expressed as cadmium (Cd)	0.03 mg/l			
		Chromium and its compounds expressed as chromium (Cr)	0.1 mg/l			
		Copper and its compounds expressed as copper (Cu)	0.15 mg/l			

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method	
W1 on Drawing No. Incinerato r 2012 PFD Rev	Waste water from treatment of exhaust gases	Mercury and its compounds expressed as mercury (Hg)	0.01 mg/l	Representative flow proportional 24- hour composite of batch discharges	Monthly	BS EN 12846 or BS EN ISO 1785 2	
C2 (final discharge Tees Estuary at Grid Reference		Nickel and its compounds expressed as nickel (Ni)	0.15 mg/l				BS EN ISO 1188 5, BS EN ISO 1729 4-2 or BS EN ISO 1558 6
NZ 5440 2485)		Lead and its compounds expressed as lead (Pb)	0.06 mg/l				
		Antimony and its compounds expressed as lead (Sb)	0.9 mg/l				
		Thallium and its compounds expressed as thallium (TI)	0.03 mg/l				
		Zinc and its compounds expressed as zinc (Zn)	0.5 mg/l				

	Point Sourc		water (other	than sewer) and	land – emissior	n limits and
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 on Drawing No. Incinerato r 2012 PFD Rev C2 (final discharge Tees Estuary at Grid Reference NZ 5440 2485)	Waste water from treatment of exhaust gases	Dioxins and furans; defined as the sum of the individual dioxins and furans I-TEQ	0.05 ng/l	Representative flow proportional 24-hour composite of batch discharges	Monthly, or otherwise biannually if agreed in writing with the Environment Agency that emissions are sufficiently stable as demonstrated by a suitable methodology	BS ISO 18073 or BS ISO 17858
		Discharge Temperature	30°C max		Continuous	In-line temperature probe
		Discharge Flowrate	420 m³/day max 20 m³/hr max at any time 60 m³/hr max up to 3 hours after high tide			Calibrated in-line flow meter

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-siteemission limits and monitoring requirements

emission limits and monitoring requirements							
Emissio n point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method	
S1	Waste water from treatment	рН	5-10	Representative composite sample from each batch	Each batch prior to discharge	Calibrated pH Meter	
	of exhaust		-	-	Continuous		
	gases	Suspended solids	45.0 mg/l or 95% of measureme nts do not exceed 30.0 mg/l [Note 1]	Representative flow proportional 24- hour composite of batch discharges	Daily	BS EN 872	
		Arsenic and its compounds expressed as arsenic (As)	0.05 mg/l		Monthly	BS EN ISO 1188 5, BS EN ISO 1729 4-2 or BS EN ISO 1558 6	
		Cadmium and its compounds expressed as cadmium (Cd)	0.03 mg/l				
		Chromium and its compounds expressed as chromium (Cr)	0.1 mg/l				
		Copper and its compounds expressed as copper (Cu)	0.15 mg/l				

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-siteemission limits and monitoring requirements

emission limits and monitoring requirements						
Emissio n point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
S1	Waste water from treatment of exhaust gases	Mercury and its compounds expressed as mercury (Hg)	0.01 mg/l	Representative flow proportional 24- hour composite of batch discharges	Monthly	BS EN 12846 or BS EN ISO 1785 2
		Nickel and its compounds expressed as nickel (Ni)	0.15 mg/l			BS EN ISO 1188 5, BS EN ISO 1729 4-2 or BS EN ISO 1558 6
		Lead and its compounds expressed as lead (Pb)	0.06 mg/l			
		Antimony and its compounds expressed as lead (Sb)	0.9 mg/l			
		Thallium and its compounds expressed as thallium (TI)	0.03 mg/l			
		Zinc and its compounds expressed as zinc (Zn)	0.5 mg/l			

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site-emission limits and monitoring requirements

Emissio n point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
S1	Waste water from treatment of exhaust gases	Dioxins and furans; defined as the sum of the individual dioxins and furans I-TEQ	0.05 ng/l	Representative flow proportional 24-hour composite of batch discharges	Monthly, or otherwise biannually if agreed in writing with the Environment Agency that emissions are sufficiently stable as demonstrated by a suitable methodology	BS ISO 18073 or BS ISO 17858
		Discharge Temperature	85 °C		Continuous	In-line temperature probe
		Discharge Flowrate	420 m³/day	-	Continuous	Calibrated in-line flow meter

Note 1: Limit based on mass balance calculation as described in IED article 46, paragraph 4, or otherwise as agreed in writing with the Environment Agency

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.	

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
Solid residues	TOC or otherwise as agreed in writing with the Environment Agency	3% or otherwise as agreed in writing with the Environment Agency	Quarterly	EN 14899 and either EN 13137 or EN 15936 or otherwise as agreed in writing with the Environment Agency	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'
Solid 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'	
Solid 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'	
Sold residues, waste water from exhaust gas cleaning	Persistent organic pollutants (POPs) if required by BAT 8 of the BAT Conclusions.		After any change that could affect the POP content of output streams.		

^{*} 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	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	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct			
Emissions to water Parameters as required by condition 3.6.1	W1	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct or 1 Jan			
Emissions to sewer Parameters as required by condition 3.6.1	S1	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct or 1 Jan			
TOC or otherwise as agreed in writing with the Environment Agency Parameters as required by condition 3.6.1	Solid residues	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	Solid 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	Solid residues	Before use of a new disposal or recycling route				

Table S4.2: Annual production/treatment			
Parameter	Units		
Total waste incinerated	tonnes		

Table S4.3 Performance parameters					
Parameter	Frequency of assessment	Units			
Annual Report as required by condition 4.2.2	Annually	-			
Natural gas consumption	Annually	kg / tonne of waste incinerated			
Solid residues	Annually	Route, tonnes and tonnes / tonne of waste incinerated			
Ammonia / Urea consumption	Annually	kg / tonne of waste incinerated			
Activated Carbon 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.			

Table S4.4 Reporting forms			
Media/parameter	Reporting format	Date of form	
Annual report required by condition 4.2.2	Annual performance report template	-	
Emissions to air	Forms air 1-9 or other forms as agreed in writing by the Environment Agency	DD/MM/YY	
Water	Form water 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY	
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	DD/MM/YY	
Residue quality	Form residue 1 and 2 or other form as agreed in writing by the Environment Agency	DD/MM/YY	

Schedule 5 - Notification

These pages outline the information that the operator must provide.

(b) Notification requirements for the breach of a limit

Emission point reference/ source

Measured value and uncertainty

Date and time of monitoring

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

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	
	any malfunction, breakdown or failure of equipment or techniques, nce not controlled by an emission limit which has caused, is 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.	

Parameter(s)

To be notified within 24 hours of Measures taken, or intended to be			
Measures taken, or intended to be	detection unless	otherwise speci	fied below
taken, to stop the emission			
Time periods for notification follo	wing detection o	f a breach of a li	mit
Parameter			Notification period
			A
(c) Notification requirements for	he breach of per	mit conditions n	ot related to limits
To be notified within 24 hours of de	ection		
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		ny significant a	dverse environmental effect
(d) Notification requirements for To be notified within 24 hours of Description of where the effect on		ny significant a	dverse environmental effect
(d) Notification requirements for To be notified within 24 hours of Description of where the effect on the environment was detected		ny significant a	dverse environmental effect
(d) Notification requirements for To be notified within 24 hours of Description of where the effect on the environment was detected Substances(s) detected Concentrations of substances detected		ny significant ad	dverse environmental effect

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.

"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

"bi-annually" means twice per year with at least five months between tests;

"CEM" Continuous emission monitor

"CEN" means Commité Européen de Normalisation

"Commissioning" means testing of the new incineration plant that involves any operation of the furnace or as agreed with the Environment Agency.

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

"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 (IED)" means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

"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.

"PAH" means Poly-cyclic aromatic hydrocarbon, and comprises Anthanthrene, Benzo[a]anthracene, Benzo[b]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.

"PFAS" means perfluoroalkyl and polyfluoroalkyl substances

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

"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.

"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

"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 solid residues 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	WHO-TEF			
	1990	2005 1997/8				
		Humans / Mammals	Fish	Birds		
Dioxins						
2,3,7,8-TCDD	1	1	1	1		
1,2,3,7,8-PeCDD	0.5	1	1	1		
1,2,3,4,7,8-HxCDD	0.1	0.1	0.5	0.05		
1,2,3,6,7,8-HxCDD	0.1	0.1	0.01	0.01		
1,2,3,7,8,9-HxCDD	0.1	0.1	0.01	0.1		
1,2,3,4,6,7,8-HpCDD	0.01	0.01	0.001	<0.001		
OCDD	0.001	0.0003	-	-		
Furans						
2,3,7,8-TCDF	0.1	0.1	0.05	1		
1,2,3,7,8-PeCDF	0.05	0.03	0.05	0.1		
2,3,4,7,8-PeCDF	0.5	0.3	0.5	1		
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1	0.1		
1,2,3,7,8,9-HxCDF	0.1	0.1	0.1	0.1		
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1	0.1		
2,3,4,6,7,8-HxCDF	0.1	0.1	0.1	0.1		
1,2,3,4,6,7,8_HpCDF	0.01	0.01	0.01	0.01		
1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.01	0.01		
OCDF	0.001	0.0003	0.0001	0.0001		

TEF schemes for dioxin-like PCBs					
Congener		WHO-TEF			
	2005	1	1997/8		
	Hum	ans / F	ish	Birds	
	mam	mals			
Non-ortho PCBs					
3,4,4',5-TCB (81)	0.000)1 (0.0005	0.1	
3,3',4,4'-TCB (77)	0.000	03	0.0001	0.05	
3,3',4,4',5 - PeCB (126)	0.1	C	0.005	0.1	
3,3',4,4',5,5'-HxCB(169)	0.03	C	0.00005	0.001	
Mono-ortho PCBs					
2,3,3',4,4'-PeCB (105)	0.000	003 <	<0.00005	0.0001	
2,3,4,4',5-PeCB (114)	0.000	003	<0.00005	0.0001	
2,3',4,4',5-PeCB (118)	0.000	003 <	<0.00005	0.00001	
2',3,4,4',5-PeCB (123)	0.000	003 <	<0.00005	0.00001	
2,3,3',4,4',5-HxCB (156)	0.000	003 <	<0.00005	0.0001	
2,3,3',4,4',5'-HxCB (157)	0.000	003 <	<0.00005	0.0001	
2,3',4,4',5,5'-HxCB (167)	0.000	003 <	<0.00005	0.00001	
2,3,3',4,4',5,5'-HpCB (189)	0.000	003 <	<0.00005	0.00001	

[&]quot;year" means calendar year ending 31 December.

When the following terms appear in the waste code list in Schedule 2, table 2.2, for that table/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

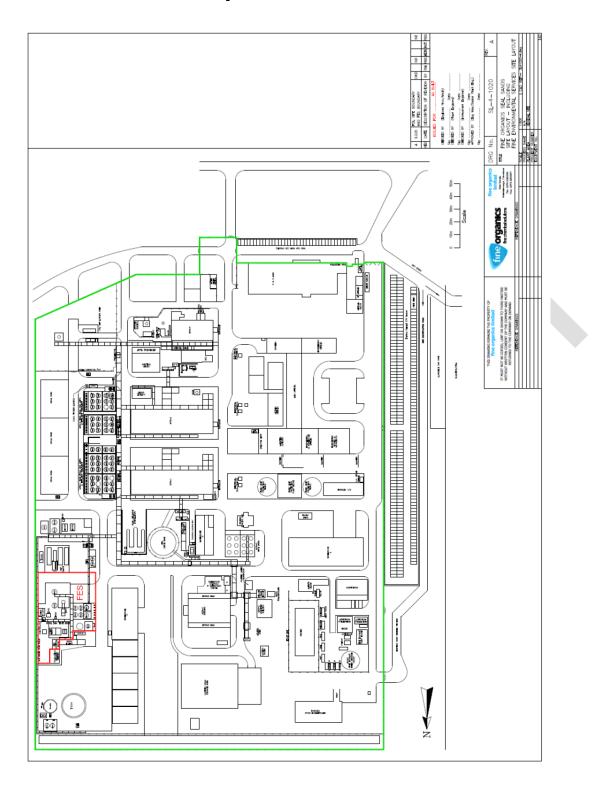
'stabilisation' means processes which change the hazardousness of the constituents in the waste and transform hazardous waste into non-hazardous waste

'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



END OF PERMIT

Annex to conditions – Derogation under Industrial Emissions Directive

Derogation under Article 15(4) of Industrial Emissions Directive

DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

Operating techniques

We have considered the Operator's proposed techniques and its comparison against other relevant techniques as described in the relevant BAT reference note. Our full reasoning is given in our decision document that accompanies the permit determination.

The operator requested a time limited derogation from BAT 29, specifically the BAT AEL for oxides of nitrogen of 180 mg/m³ daily average, in the BAT conclusions for waste incineration (published on 3rd December 2019). The derogation is until 3rd December 2026, 3 years beyond the compliance date. The emission limits during the derogation period will be 360 mg/m³.

The proposed techniques will result in emissions for which the appropriate emission limits are less stringent than those associated with the best available techniques as described in BAT conclusions. We have considered the operators justification for departure from the guidance and accept it in the following respects and for the following reasons;

The achievement of emission levels associated with the best available techniques as described in BAT conclusions would lead to disproportionately higher costs compared to the environmental benefits due to: **the technical characteristics of the installation concerned.**