

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

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SRCL Limited

Avonmouth Healthcare Waste Incinerator and Transfer Facility  
Holesmouth Road  
Avonmouth  
Bristol  
BS11 9BP

**Variation application number**

EPR/VP3130EF/V003

**Permit number**

EPR/VP3130EF

# Avonmouth Healthcare Waste Incinerator and Transfer Facility

## Permit number EPR/VP3130EF

### 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 S5.1 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	Stepped hearth
Number of lines	1
Principal waste type	Clinical
Stack height	40 m
Permitted plant capacity	6,570 tonnes per year
Electricity generation capacity	0.15MWe

The installation is designed for the thermal treatment of healthcare (clinical) waste, by incineration. Energy will be recovered from the installation in the form of electricity, for use primarily within the facility and for the export of any surplus to the national grid.

The installation is located on a 4.3 hectare site at national grid reference ST 521 805, in the industrialised area of Avonmouth, near to Bristol. The installation is located approximately 10km north west of the city centre.

The installation processes up to 6,570 tonnes of waste per year (0.75 tonnes per hour) in a single incineration line. The waste is primarily packaged healthcare waste, collected from various medical, veterinary and pharmaceutical sites within, but not exclusively, the catchment area of the incineration plant. This will also include some specified hazardous wastes.

The incinerator is a mass burn, stepped hearth design. Waste is delivered to the plant by road in United Nations approved packaging, and is stored in locked wheeled carts. The waste is loaded from the wheeled carts into a cradle for inspection prior to being loaded into the incinerator. Any non-conforming waste is intercepted at this point and reported in-line with the operational procedures. Once unloaded the waste carts are washed in a purpose built cart washer, then rinsed and drained before being returned to customers. The rinse water is recycled as wash water to minimise water usage.

Heat from the combustion process is used to generate steam in a multi stage boiler plant which is integral to the combustion process. This is fed to a steam reciprocating unit to generate electricity. The energy recovery plant has a total capacity of approximately 4MW (thermal input) and is capable of generating up to 0.15MWe of electrical power, of which up to 0.058MWe will be exported to the National Grid. Provision has been made in the design for the plant to be capable of supplying heat in the form of steam, once a viable heat user becomes available to take the heat as an output.

The furnace design ensures that a temperature of at least 850°C (or 1000°C for cytotoxic or cytostatic waste) for a period of at least two seconds is achieved in the secondary combustion chamber. To ensure that the temperature does not fall below the required minimum temperature, auxiliary burners firing natural gas are automatically triggered by online process monitoring equipment. Auxiliary burners are also used to achieve and maintain the minimum furnace temperature during start up and shutdown periods.

Combustion gases are cleaned before they are released to atmosphere. There are four components to the flue gas cleaning and abatement technique:

- Selective Non Catalytic Reduction (SNCR) for the abatement of nitrogen oxides;
- dry hydrated lime reagent, injected to neutralise acid gas compounds;
- activated carbon, injected to absorb mercury, dioxins and furans; and
- bag filtration to remove particulates.

Cleaned flue gases exiting the abatement system of the incineration line are discharged through a 40 metre tall stack. Exhaust flue gases are continuously monitored for particulate matter, oxides of nitrogen, sulphur dioxide, carbon monoxide, total organic carbon and hydrogen chloride. Monitoring for heavy metals, dioxins and hydrogen fluoride is carried out periodically.

Liquid effluent emissions from the installation are directed to foul sewer and comprise of:

- boiler blow down effluent;
- washwater from the process of cleaning the waste carts;
- firefighting water when necessary.

The incineration process results in solid residues of incinerator bottom ash (IBA) and air pollution control (APC) residues. Following quenching in the ash pit the IBA from the combustion process is transferred to skips for off-site disposal. APC residues are collected and temporarily stored on site prior to being removed from the site in enclosed tankers for subsequent disposal.

The permit also controls the operation of a clinical waste transfer station. The relevant listed activity is Section 5.6 Part A(1)(a) for the temporary storage of hazardous waste with a total capacity exceeding 50 tonnes. Following storage this waste is transferred off-site for disposal or recovery, with any residual waste being directed to the incineration plant.

The main features of the facility are as follows:

An internal storage area, within the waste processing building, with a storage capacity of 50 tonnes. The area has an impermeable surface together with a sealed drainage system for the storage of waste in sealed containers.

An external storage area, adjacent to the waste processing building, has a storage capacity of 30 tonnes. The area has an impermeable surface together with a sealed drainage system for the storage of waste in skips.

### The Waste Operation

As described above, the permit controls the operation of a clinical waste transfer station. The storage and repackaging of non-hazardous waste prior to transfer off-site for disposal or recovery is not a Part A listed activity under EPR, but a 'waste operation' under the Waste Framework Directive. Following storage this waste will be transferred off-site for disposal or recovery, with any residual waste being directed to the incineration plant. The features of the facility are as described in the section above.

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

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application EPR/VP3130EF/A001	Duly made 10/03/14	
Additional Information Received	30/06/14	Response to Schedule 5 Notice dated 09/06/14
Additional Information Received	12/09/14	Response to Environment Agency e-mail dated 04/08/14
Additional Information Received	25/11/14	Response to Environment Agency e-mails dated 25/11/14
Permit determined EPR/VP3130EF	22/12/2014	Issue of bespoke permit to SRCL Ltd
Application EPR/VP3130EF/V003 (variation)	Duly made 04/01/18	Variation to add SNCR system for abatement of NOx emissions to air
Variation determined EPR/VP3130EF/V002	20/02/18	Varied permit issued
Regulation 61 notice issued	10/12/21	Regulation 61 Notice requiring information for Statutory review of permit. BAT Conclusions published 03 December 2019.
Regulation 61 notice response	13/04/22	
Variation issued EPR/VP3130EF/V004	08/01/24	

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/VP3130EF

### Issued to

**SRCL Limited** (“the operator”)

whose registered office is

**Indigo House  
Sussex Avenue  
Leeds  
West Yorkshire  
LS10 2LF**

company registration number 03226910

to operate a regulated facility at

**Avonmouth Healthcare Waste Incinerator and Transfer Facility  
Holesmouth Road  
Avonmouth  
Bristol  
BS11 9BP**

to the extent set out in the schedules.

The notice shall take effect from 08/01/2024

Name	Date
<b>Rob McHale</b>	<b>08/01/2024</b>

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/VP3130EF**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/VP3130EF/V003 authorising,

**SRCL Limited** (“the operator”),

whose registered office is

**Indigo House  
Sussex Avenue  
Leeds  
West Yorkshire  
LS10 2LF**

company registration number 03226910

to operate an installation and a waste operation at

**Avonmouth Healthcare Waste Incinerator and Transfer Facility  
Holesmouth Road  
Avonmouth  
Bristol  
BS11 9BP**

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

<b>Name</b>	<b>Date</b>
<b>Rob McHale</b>	<b>08/01/2024</b>

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.
- 1.1.5 The operator shall comply with the requirements of an approved competence scheme.

### 1.2 Energy efficiency

- 1.2.1 For the following activities referenced in schedule 1, table S1.1 (AR1 to AR5) the operator shall:
- (a) take appropriate measures to ensure that energy is recovered with a high level of energy efficiency and energy is used efficiently in the activities.
  - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) take any further appropriate measures identified by a review.
- 1.2.2 The operator shall review the viability of Combined Heat and Power (CHP) implementation at least every 4 years, or in response to any of the following factors, whichever comes sooner:
- (a) new plans for significant developments within 15 km of the installation;
  - (b) changes to the Local Plan;
  - (c) changes to the UK CHP Development Map or similar; and
  - (d) new financial or fiscal incentives for CHP.

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

### 1.3 Efficient use of raw materials

- 1.3.1 For the following activities referenced in schedule 1, table S1.1 (AR1 to AR5) the operator shall:
- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
  - (b) maintain records of raw materials and water used in the activities;



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

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

- 1.4.1 The operator shall take appropriate measures to ensure that:
  - (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
  - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
  - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

## **2 Operations**

### **2.1 Permitted activities**

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).
- 2.1.2 For the following activities referenced in schedule 1, table S1.1 (AR1 to AR5) 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 green on the site plan at schedule 7 to this permit.

### **2.3 Operating techniques**

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

in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table S2.2, S2.3; and
  - (b) it conforms to the description in the documentation supplied by the producer or holder.
- 2.3.5 For the following activities referenced in schedule 1, table S1.1 (AR1) 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 For the following activities referenced in schedule 1, table S1.1 (AR1) 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.
  - (c) it is cytotoxic or cytostatic waste and the combustion chamber temperature is below 1,000°C
  - (d) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded during abnormal operation; or
  - (e) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than during abnormal operation; or

- (f) continuous emission monitors to demonstrate compliance with any continuous emission limit value in schedule 3 table S3.1 are unavailable other than during abnormal operation; or
- (g) there is a stoppage, disturbance or failure of the activated carbon abatement system, other than during abnormal operation.
- (h) continuous emission monitors to demonstrate compliance with the emission limit values for particulates, TOC or CO in schedule 3 are unavailable unless alternative techniques, as agreed in writing with the Environment Agency, are used to demonstrate compliance with those emission limit values.

2.3.13 The operator shall record the beginning and end of each period of “abnormal operation”.

2.3.14 During a period of “abnormal operation”, the operator shall restore normal operation of the failed equipment or replace the failed equipment as soon as possible.

2.3.15 The operator shall interpret the start of the period of “abnormal operation” as the earliest of the following:

- (a) a technically unavoidable stoppage, disturbance, or failure of continuous emission monitors.
- (b) a technically unavoidable stoppage, disturbance, or failure of the activated carbon abatement system
- (c) Any other technically unavoidable stoppage, disturbance, or failure of the plant which is causing or could lead to an exceedance of an emission limit value in table S3.1.

2.3.16 The operator shall interpret the end of the period of “abnormal operation” as the earliest of the following:

- (a) when the failed equipment is repaired and brought back into normal operation;
- (b) when the operator initiates a shut down of the waste combustion activity, as described in the application or as agreed in writing with the Environment Agency;
- (c) The failed equipment has not been repaired and brought back into normal operation and a single period of abnormal operation reaches a duration of 4 hours after the start of abnormal operation on an incineration line
- (d) Abnormal operation occurs on an incineration line and the cumulative duration of abnormal operation periods over 1 calendar year has reached 60 hours on that incineration line;

2.3.17 The operator shall have at least one auxiliary burner in each line which shall be operated at start up, shut down and as required during operation to ensure that the operating temperature specified in condition 2.3.12 is maintained as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.3.12 is maintained in the combustion chamber, such burner(s) shall be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.

2.3.18 If Infectious clinical waste is burned, it must be placed in the furnace without first being mixed with other categories of waste, using techniques which are no less effective than those described in the application.

2.3.19 Bottom ash and APC residues shall not be mixed.

## **2.4 Improvement programme**

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

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

## 3 Emissions and monitoring

### 3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.
- 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 S3.4. Additional samples shall be taken and tested and appropriate action taken, whenever:
- (a) disposal or recovery routes change; or
  - (b) it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

### 3.2 Emissions 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 <sub>2</sub> expressed as NO <sub>2</sub> )	20%
• Particulate matter	30%
• Total organic carbon (TOC)	30%
• Hydrogen chloride	40%
• Ammonia	40%
  - (b) valid half-hourly average values or 10-minute averages shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals in condition 3.2.2 (a).
  - (c) where it is necessary to calibrate or maintain the monitor and this means that data are not available for a complete half-hour or 10 minute period, the half-hourly average or 10-minute average shall in any case be considered valid if measurements are available for a minimum of 20 minutes or 7 minutes during the half-hour or 10-minute period respectively. The number of half-hourly or 10-minute averages so validated shall not exceed 5 or 15 respectively per day;
  - (d) daily average values shall be calculated as follows:
    - (i) 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) and S3.2;
- (b) process monitoring specified in table S3.3;
- (c) residue quality in table S3.4.

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) and S3.2 unless otherwise agreed in writing by the Environment Agency.

## 3.7 Pests

3.7.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.

3.7.2 The operator shall:

- (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
- (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## **3.8 Fire prevention**

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

# **4 Information**

## **4.1 Records**

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

## **4.2 Reporting**

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 For the following activities referenced in schedule 1, table S1.1 (AR1 to AR5) a report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year using the annual report form specified in schedule 4, table S4.4 or otherwise in a format agreed with the Environment Agency. The report(s) shall include as a minimum:
- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
  - (b) the annual production /treatment data set out in schedule 4 table S4.2;
  - (c) the performance parameters set out in schedule 4 table S4.3
  - (d) the functioning and monitoring of the incineration plant in a format agreed with the Environment Agency. The report shall, as a minimum requirement (as required by Chapter IV of the Industrial Emissions Directive) give an account of the running of the process and the emissions into air and water compared with the emission standards in the IED.

- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4 ; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.
- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

### **4.3 Notifications**

- 4.3.1 In the event:
- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately:
    - (i) inform the Environment Agency,
    - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
    - (iii) take the measures necessary to prevent further possible incidents or accidents;
  - (b) of a breach of any permit condition the operator must immediately:
    - (i) inform the Environment Agency, and
    - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
  - (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
  - (d) of activation of the emergency release valve the operator must inform the Environment Agency immediately.
- 4.3.2 Any information provided under condition 4.3.1 (a), (b) or (c) shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Any information provided under condition 4.3.1 (d) shall be confirmed by sending the information listed in part (a), and part (d) if required, of schedule 5 to this permit within the time period specified in that schedule.
- 4.3.4 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.5 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:



Where the operator is a registered company:

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

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

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

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

4.3.6 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

4.3.7 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

## **4.4 Interpretation**

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

# Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
AR1	S5.1 A1 (a)	The incineration of hazardous waste in a waste incineration plant with a capacity of 10 tonnes per day or more.	<p>From receipt of waste to emission of exhaust gas and removal from site of waste arising.</p> <p>From receipt of waste to emission of exhaust gas and removal from site of waste arising.</p> <p>The total amount of waste stored on site at any one time, including both hazardous and non-hazardous waste, shall not exceed 80 tonnes.</p> <p>The total amount of waste stored on site within a building at any one time, including both hazardous and non-hazardous waste, shall not exceed 50 tonnes.</p> <p>The total amount of waste stored on site in the external storage area at any one time, including both hazardous and non-hazardous waste, shall not exceed 30 tonnes.</p> <p>Waste shall be stored on impermeable surfacing with sealed drainage.</p> <p>Waste shall not be stored in vehicles or vehicle trailers, unless they are being received for immediate offloading or prepared for imminent transfer (that is, they will be removed from site within 24 hours, or 72 hours if over a weekend).</p> <p>Pharmaceutical, chemical, anatomical and palletised waste shall be stored securely within designated areas of the building.</p> <p>Infectious clinical waste shall be stored for no longer than 7 days if outside, or for no longer than 14 days if stored in a building.</p> <p>Refrigerated anatomical waste shall be stored for no longer than 14 days.</p> <p>Unrefrigerated anatomical waste shall be stored for no longer than 24 hours, or up to 72 hours if over a weekend.</p>

			<p>The following waste types shall be stored on site for no longer than 6 months:</p> <ul style="list-style-type: none"> <li>• non-infectious cytotoxic and cytostatic medicines</li> <li>• other hazardous chemicals or other hazardous wastes</li> </ul> <p>Notwithstanding the limits given above where a shorter storage time period is given in an agreed management plan then that time period shall take precedence.</p> <p>No waste types shall be submitted to this activity other than those wastes specified in Schedule 2, Table S2.2.</p>
AR2	S5.6 Part A(1)(a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.	<p>Storage of hazardous waste.</p> <p>R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).</p> <p>D15 Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced).</p>	<p>From receipt and storage of hazardous waste on site to its repackaging on site or its transfer off-site.</p> <p>The total amount of waste stored on site at any one time, including both hazardous and non-hazardous waste, shall not exceed 80 tonnes.</p> <p>The total amount of waste stored on site within a building at any one time, including both hazardous and non-hazardous waste, shall not exceed 50 tonnes.</p> <p>The total amount of waste stored on site in the external storage area at any one time, including both hazardous and non-hazardous waste, shall not exceed 30 tonnes.</p> <p>Waste shall be stored on impermeable surfacing with sealed drainage.</p> <p>Waste shall not be stored in vehicles or vehicle trailers, unless they are being received for immediate offloading or prepared for imminent transfer (that is, they will be removed from site within 24 hours, or 72 hours if over a weekend).</p> <p>Pharmaceutical, chemical, anatomical and palletised waste shall be stored securely within designated areas of the building.</p> <p>Infectious clinical waste shall be stored for no longer than 7 days if outside, or for no longer than 14 days if stored in a building.</p> <p>Refrigerated anatomical waste shall be stored for no longer than 14 days.</p> <p>Unrefrigerated anatomical waste shall be stored for no longer than 24 hours, or up to 72 hours if over a weekend.</p>

			<p>The following waste types shall be stored on site for no longer than 6 months:</p> <ul style="list-style-type: none"> <li>• non-infectious cytotoxic and cytostatic medicines</li> <li>• other hazardous chemicals or other hazardous wastes</li> </ul> <p>Notwithstanding the limits given above where a shorter storage time period is given in an agreed management plan then that time period shall take precedence.</p> <p>No waste types shall be submitted to this activity other than those hazardous wastes specified in Schedule 2, Table S2.3.</p>
AR3	<p>Section 5.3 Part A(1)(a)(iv)</p> <p>Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving repackaging.</p>	<p>Repackaging of hazardous waste.</p> <p>R12 Exchange of waste for submission to any of the operations numbered R1 to R11.</p> <p>D14 Repackaging prior to submission to any of the operations numbered D1 to D13.</p>	<p>Repackaging is limited to:</p> <ul style="list-style-type: none"> <li>• taking a waste package (for example a bag, drum or box) out of one cart or bulk container (for example a skip) and placing it into another cart or bulk container (for example, a skip)</li> <li>• taking a waste package from a cart or bulk container (for example, skip) and placing it onto a pallet or vehicle</li> <li>• taking a waste package from a pallet and placing it into a cart or bulk container (for example, skip)</li> </ul> <p>Waste shall not be transferred, removed or separated from its primary packaging (for example bags, bins, boxes and blister packs).</p> <p>Repackaging of waste shall not change either the maximum storage times for waste on site or the amount that can be stored.</p> <p>No waste types shall be submitted to this activity other than those hazardous wastes specified in Schedule 2, Table S2.3.</p>
<b>Directly Associated Activities</b>			
AR4	Directly Associated Activity	Generation of electrical power using a steam reciprocating unit from energy recovered from the flue gases.	From receipt of steam to export of electricity for either on-site use or export to the grid
AR5	Cleaning and disinfection of containers and carts.	Washer that cleans and disinfects.	Handling, cleaning and storage of containers and carts prior to dispatch. Bin, container or cart washing equipment shall be purpose-built, contained and located in a designated area of the facility provided with an

			impermeable surface with self-contained drainage. The cart or bin wash must be designed to collect and contain all wash waters, including any spray.
<b>Activity reference</b>	<b>Description of activities for waste operations</b>	<b>Limits of activities</b>	
AR6	<p>Storage of non-hazardous waste.</p> <p>R13 Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).</p> <p>D15 Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced).</p>	<p>From receipt and storage of non-hazardous waste on site to its repackaging or light compaction on site or its transfer off-site.</p> <p>The total amount of waste stored on site at any one time, including both hazardous and non-hazardous waste, shall not exceed 80 tonnes.</p> <p>The total amount of waste stored on site within a building at any one time, including both hazardous and non-hazardous waste, shall not exceed 50 tonnes.</p> <p>The total amount of waste stored on site in the external storage area at any one time, including both hazardous and non-hazardous waste, shall not exceed 30 tonnes.</p> <p>No waste shall be treated</p> <p>Waste shall be stored on impermeable surfacing with sealed drainage.</p> <p>Waste shall not be stored in vehicles or vehicle trailers, unless they are being received for immediate offloading or prepared for imminent transfer (that is, they will be removed from site within 24 hours, or 72 hours if over a weekend).</p> <p>Pharmaceutical, chemical, anatomical and palletised waste shall be stored securely within designated areas of the building.</p> <p>Non-infectious offensive waste shall be stored for no longer than 7 days if outside, or for no longer than 14 days if stored in a building.</p> <p>Refrigerated anatomical waste shall be stored for no longer than 14 days.</p> <p>Unrefrigerated anatomical waste shall be stored for no longer than 24 hours, or up to 72 hours if over a weekend.</p> <p>The following waste types shall be stored on site for no longer than 6 months:</p> <ul style="list-style-type: none"> <li>• non-infectious, non-hazardous medicines</li> <li>• other non-hazardous chemicals or other non-hazardous wastes</li> </ul>	

		<p>Notwithstanding the limits given above where a shorter storage time period is given in an agreed management plan then that time period shall take precedence.</p> <p>No waste types shall be submitted to this activity other than those non-hazardous wastes specified in Schedule 2, Table S2.3.</p>
AR7	<p>Repackaging of non-hazardous waste.</p> <p>R12 Exchange of waste for submission to any of the operations numbered R1 to R11</p> <p>D14 Repackaging prior to submission to any of the operations numbered D1 to D13</p>	<p>Repackaging is limited to:</p> <ul style="list-style-type: none"> <li>• taking a waste package (for example a bag, drum or box) out of one cart or bulk container (for example a skip) and placing it into another cart or bulk container (for example, a skip)</li> <li>• taking a waste package from a cart or bulk container (for example, skip) and placing it onto a pallet or vehicle</li> <li>• taking a waste package from a pallet and placing it into a cart or bulk container (for example, skip)</li> </ul> <p>Waste shall not be transferred, removed or separated from its primary packaging (for example bags, bins, boxes and blister packs).</p> <p>Washing and disinfection of reusable sharps bins and repackaging of wastes shall take place within a building on an impermeable surface with sealed drainage.</p> <p>Repackaging shall take place within a building on an impermeable surface with sealed drainage.</p> <p>Repackaging of waste shall not change either the maximum storage times for waste on site or the amount that can be stored.</p> <p>Bin, container or cart washing equipment shall be purpose-built, contained and located in a designated area of the facility provided with self-contained drainage. The washer must be designed to collect and contain all wash waters, including any spray.</p> <p>No waste types shall be submitted to this activity other than those non-hazardous wastes specified in Schedule 2, Table S2.3.</p>
AR8	<p>Light compaction of non-hazardous waste.</p> <p>R12 Exchange of waste for submission to any of the operations numbered R1 to R11</p> <p>D14 Repackaging prior to submission to any of the operations numbered D1 to D13</p>	<p>From light compaction of waste to storage of compacted waste.</p> <p>No more than 10 tonnes per day of non-hazardous waste shall be compacted.</p>

		<p>All compaction shall take place on an impermeable surface with sealed drainage.</p> <p>Compaction of waste shall not change either the maximum storage times for waste on site or the amount that can be stored.</p> <p>Bin, container or cart washing equipment shall be purpose-built, contained and located in a designated area of the facility provided with self-contained drainage. The cart or bin wash must be designed to collect and contain all wash waters, including any spray.</p> <p>No waste types shall be submitted to this activity other than those non-hazardous wastes specified in Schedule 2, Table S2.4.</p>
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<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application EPR/VP3130EF/A001	<ul style="list-style-type: none"> <li>• Parts B2 and B3 of the Application Form</li> <li>• Supporting information document (reference AV/201305) including Appendices A and C.</li> <li>• Responses to questions 5, 9, 10, 14, 15 and 23 of the Not Duly Made letter.</li> </ul>	10/03/14
Response to Schedule 5 Notice dated 09/06/14 EPR/VP3130EF/A001	<ul style="list-style-type: none"> <li>• Abnormal emissions assessment report, reference S1587-0300-0006RSF.</li> <li>• Human Health Risk Assessment update, reference S1587-0300-0005RSF</li> </ul>	30/06/14
Additional information EPR/VP3130EF/A001	<ul style="list-style-type: none"> <li>• Responses to questions 1, 2, 3, 5, 7 and 8 of Environment Agency e-mail dated 04/08/14.</li> <li>• Responses to Environment Agency emails dated 25/11/14.</li> </ul>	25/11/14
Application for variation EPR/VP3130EF/V002	<ul style="list-style-type: none"> <li>• Parts C2 and C3 of the Application form and relevant supporting information, including               <ul style="list-style-type: none"> <li>a) Non-technical summary, sections 2, 3.2.1 and 3.2.2-3</li> <li>b) Incident Response Plan.</li> </ul> </li> </ul>	01/11/17
Healthcare waste: appropriate measures for permitted facilities  Version published 13 July 2020	<p>Other than:</p> <ul style="list-style-type: none"> <li>• those parts for which an alternative measure has been proposed below.</li> </ul> <p>all of the following parts of the appropriate measures guidance shall apply:</p> <ul style="list-style-type: none"> <li>• Waste pre-acceptance, acceptance and waste tracking appropriate measures</li> <li>• Waste storage, segregation and handling appropriate measures</li> </ul> <p>The following alternative measures have been agreed:</p>	-

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
	<ul style="list-style-type: none"> <li>Waste pre-acceptance, acceptance and waste tracking appropriate measures – waste acceptance measures 21 and 22, waste tracking measure 6.</li> <li>Waste storage, segregation and handling appropriate measures – measure 11</li> </ul>	
Chemical waste: appropriate measures for permitted facilities  Version published 18 November 2020	Techniques as approved through improvement condition IC10	-
Response to regulation 61 notice	Operating techniques as set out in the response to the regulation 61 notice.	13/04/22

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC1	<p>The operator shall perform a study to determine the extent to which the operation of the current systems in place at the plant to minimise NOx emissions can be further optimised such that emissions are reduced as far as possible below 180 mg/Nm<sup>3</sup> as a daily average, without significantly increasing emissions of other pollutants or having a significant negative effect on plant operation, reliability or bottom ash quality. The study shall be based on the results of trials carried out at the installation and shall have regard to the recommendations for test conditions set out in Section 5.4.3 of report titled 'Establishing factors that influence NOx reduction at waste incineration plant to levels below the upper end of the BAT-AELs' (dated 14/01/2022), or other methodology agreed in writing with the Environment Agency. A written report of the study shall be submitted to the Environment Agency for approval which shall include but not necessarily be limited to the following:</p> <ul style="list-style-type: none"> <li>A brief description of the currently installed measures at the installation to minimise NOx emissions, including details of how the reagent dosing system responds to emissions monitoring data and historic data which illustrates the current achievable level of daily NOx emissions.</li> <li>The results of trials conducted to further reduce daily average NOx emissions using currently installed measures, including:               <ul style="list-style-type: none"> <li>a description of the parameters that were varied during the trial e.g. ammonia or urea feed rates, physical form of urea injected, air flows, and the range over which they were varied</li> <li>the levels of NOx achieved and associated levels of ammonia and nitrous oxide emissions and reagent consumption</li> </ul> </li> </ul>	08/07/2024



Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<ul style="list-style-type: none"> <li>○ observed effects and predicted long-term impacts on plant operation, reliability and maintenance regime</li> <li>○ any changes to the composition of the bottom ash and boiler ash and the implications of those changes for the ability to process and use the ash, as well as for the pollution potential of the ash both during processing and its subsequent use as a secondary aggregate</li> <li>○ any other relevant cross-media effects</li> </ul> <p>The report shall also include a description of the extent to which current systems in place at the plant to minimise NO<sub>x</sub> emissions can be optimised on a permanent basis, including justification and an implementation plan where relevant.</p>	
IC2	The operator shall submit a report to the Environment Agency for approval on whether waste feed to the plant can be proven to have a low and stable mercury content. The report shall have regard to BAT 4 of the BAT conclusions, be based on historic mercury emissions monitoring data and have regard to the Environment Agency Mercury Monitoring Protocol.	31/01/24
IC3	The operator shall submit a report to the Environment Agency for approval on whether dioxin emissions to air are stable. The report shall have regard to BAT 4 of the BAT conclusions, be based on historic dioxin emissions monitoring data and have regard to the Environment Agency Dioxins Monitoring Protocol.	31/01/24
IC4	<p>The operator shall calculate the boiler efficiency using the method set out in the general considerations section of the BAT conclusions and submit details of the calculation to the Environment Agency for approval. The calculation shall use the R1 efficiency status, boiler efficiency determination guidance (or other methodology as agreed in writing with the Environment Agency) to calculate boiler efficiency which can then be used to calculate Q<sub>th</sub>.</p> <p>Where the calculated boiler efficiency is below the range specified in BAT 20 of the BAT conclusions, the operator shall carry out an assessment of the opportunities to increase the energy efficiency of the installation.</p> <p>The assessment shall include but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>• Improvements that could be made to the furnace (including control systems) in order to increase the amount of thermal energy produced per unit of thermal energy in the waste.</li> <li>• Improvements that could be made to the steam system and related components to allow a greater quantity of heat to be generated per unit of thermal energy produced from the waste.</li> <li>• Improvements in the heat efficiency of the plant's ancillary systems that could be made in order to reduce the heat loads of the plant.</li> <li>• Where relevant, an implementation plan for the improvements identified, including the anticipated increase in the boiler efficiency.</li> </ul> <p>A written copy of the assessment shall be submitted to the Environment Agency for approval.</p>	08/01/2025

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC5	<p>The operator shall carry out an assessment of the power demand associated with critical equipment required to maintain combustion and abatement systems and prevent operation of the emergency release valve (ERV) until the plant can be shut down safely or returned to normal operation. A comparison of this load (kWe) with the current provision for back-up power systems, and their response time in the event of:</p> <ul style="list-style-type: none"> <li>(i) fluctuations in power to the site, and</li> <li>(ii) the total loss of power to the facility</li> </ul> <p>shall be undertaken. Critical equipment shall include but not be limited too, the ID fan, compressed air systems, boiler feedwater pumps, PLC and auxiliary burners, CEMS as well as any other equipment identified in your response to the Regulation 61 Notice (received on 13/04/22).</p> <p>A report of the assessment shall be submitted to the Environment Agency for approval.</p>	08/07/2024
IC6	<p>The operator shall undertake an assessment of the technical and practical viability of installing back-up power equipment at the installation that are of sufficient capacity (as a minimum for the kWe identified in IC5) and have an appropriate response time to avoid activation of the emergency release valve (ERV) and maintains combustion following interruption or failure of power supply to the facility.</p> <p>A report on the assessment shall be submitted to the Environment Agency for approval.</p> <p>The operator shall install and integrate measures for the provision of back-up power within 12 months from the date of approval</p>	3 months from date of approval of improvement condition IC5
IC7	<p>The operator shall develop a method for assessing and identifying the root cause of the operation of the emergency release valve (ERV). The method shall have regard to the approach proposed in the Report titled 'Emergency Releases from the Incineration of Hazardous and Healthcare Waste' dated 26 June 2023 and shall include as a minimum an assessment of the adequacy of:</p> <ul style="list-style-type: none"> <li>• The design and specification of equipment to prevent mechanical and electrical failure of critical equipment</li> <li>• The provision of back-up systems, redundancy and availability of spares for critical equipment</li> <li>• Planned Preventative Maintenance of critical equipment</li> <li>• Site management including Operating Procedures and management of personnel</li> <li>• A rolling assessment of mitigation measures that will prevent re-occurrence of the cause of an ERV activation</li> </ul>	08/07/2024

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
	The operator shall submit details of the method to be used to the Environment Agency for approval and incorporate it into their Environmental Management System.	
IC8	<p>The operator shall undertake a detailed review of the design, provision of redundancy and maintenance regimes for critical equipment and operating procedures that may result in operation of the emergency release valve (ERV).</p> <p>The review shall have regard to the immediate and root causes and mitigation measures identified in the Report titled 'Emergency Releases from the Incineration of Hazardous and Healthcare Waste' dated 26 June 2023.</p> <p>A report of the findings of the review and details of proposed improvements to reduce the potential for activation of the ERV, including timescales for their implementation, shall be submitted to the Environment Agency for approval.</p>	08/10/2024
IC9	<p>Following notification from the Environment Agency after repeat operation of the emergency release valve (ERV), the Operator shall undertake air dispersion modelling on the short-term environmental impact of the operation of the ERV on air quality and the environment. The assessment shall follow the approach in the Environment Agency's Air Emissions Risk Assessment guidance and have regard to the nature and duration of ERV activations that occurred during the last 3 years of the operation of the installation.</p> <p>The methodology for the impact assessment including assumptions on pollutant concentrations, exhaust gas characteristics and event durations shall be agreed with the Environment Agency in advance of the modelling being undertaken.</p> <p>The operator shall submit a report summarising the dispersion modelling and the results to the Environment Agency for approval</p>	9 months from written notification from the Environment Agency
IC10	<p>The operator shall review techniques against the following sections of the Chemical waste: appropriate measures for permitted facilities guidance (Version published 18 November 2020):</p> <ul style="list-style-type: none"> <li>• Waste pre-acceptance, acceptance and waste tracking appropriate measures</li> <li>• Waste storage, segregation and handling appropriate measures</li> </ul> <p>The operator shall submit a report to the Environment Agency for approval to demonstrate which measures are currently complied with. Where measures are not currently complied with the report shall include details and justification of:</p> <ul style="list-style-type: none"> <li>• When measures will be complied with; and/or</li> <li>• Measures that are not relevant; and/or</li> </ul>	08/01/2025

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
	<ul style="list-style-type: none"> <li>Alternative techniques</li> </ul>	
IC11	<p>The operator shall review plant operation and emissions monitoring data over at least the previous 12 months to establish how daily average emissions should be determined. The operator shall submit a report to the Environment Agency for approval that summarises the review and include but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>The number of days on which the plant did not operate for a complete 24 hours</li> <li>Where the plant did not operate for 24 hours the number of hours that it did operate for and the number of hours where emissions were considered to be stable taking into account start-up and shut-down definitions.</li> <li>A proposal for the number of half hourly averages or 10 minute averages that are required for a daily average value to be valid</li> </ul>	08/10/2025

## Schedule 2 – Waste types, raw materials and fuels

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

Table S2.2 Permitted waste types and quantities for incineration plant	
Maximum quantity	6,570 tonnes per year
Waste code	Description
	For hazardous wastes listed in table S2.2 - Calorific values and pollutant compositions as specified in the application
<b>02</b>	<b>Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 02	animal-tissue waste
02 01 03	plant-tissue waste
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
02 02 02	animal-tissue waste
02 02 03	materials unsuitable for consumption or processing
<b>02 03</b>	<b>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</b>
02 03 04	materials unsuitable for consumption or processing
<b>02 05</b>	<b>wastes from the dairy products industry</b>
02 05 01	materials unsuitable for consumption or processing
<b>02 06</b>	<b>wastes from the baking and confectionery industry</b>
02 06 01	materials unsuitable for consumption or processing
<b>07</b>	<b>Wastes from organic chemical processes</b>
<b>07 05</b>	<b>wastes from the MFSU of pharmaceuticals</b>
07 05 13*	solid wastes containing hazardous substances
07 05 14	solid wastes other than those mentioned in 07 05 13
<b>15</b>	<b>Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 09	textile packaging

<b>Table S2.2 Permitted waste types and quantities for incineration plant</b>	
<b>Maximum quantity</b>	<b>6,570 tonnes per year</b>
<b>Waste code</b>	<b>Description</b>
15 01 10*	packaging containing residues of or contaminated by hazardous substances
<b>16</b>	<b>Wastes not otherwise specified in the list</b>
16 01 21*	hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14
<b>16 02</b>	<b>wastes from electrical and electronic equipment</b>
16 02 13*	discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
<b>16 05</b>	<b>Gases in pressure containers and discarded chemicals</b>
16 05 06*	laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals
16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08
<b>18</b>	<b>WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (EXCEPT KITCHEN AND RESTAURANT WASTES NOT ARISING FROM IMMEDIATE HEALTH CARE)</b>
<b>18 01</b>	<b>wastes from natal care, diagnosis, treatment or prevention of disease in humans</b>
18 01 01	non-infectious sharps, not contaminated with chemicals or medicines
18 01 01 and 18 01 09	non-infectious sharps from vaccines delivered in mass vaccination centres, in the community and in care homes
18 01 02	non-infectious anatomical waste, not chemically preserved
18 01 02 and 18 01 06*	non-infectious anatomical waste, chemically preserved, hazardous chemicals
18 01 02 and 18 01 07	non-infectious anatomical waste, chemically preserved, non-hazardous chemicals
18 01 03*	infectious waste, not contaminated with chemicals or medicines (may contain sharps) infectious anatomical waste, not chemically preserved infectious gypsum wastes (for example, plaster casts and moulds)
18 01 03* and 18 01 06* or 18 01 07	infectious waste, contaminated with chemicals infectious anatomical waste, chemically preserved
18 01 03* and 18 01 08* or 20 01 31*	infectious waste, contaminated with cytotoxic and cytostatic medicines – (may contain sharps)
18 01 03* and 18 01 09	infectious waste, medicinally contaminated (not cytotoxic or cytostatic) – (may contain sharps) sharps from vaccinations delivered in hospitals or GP surgeries
18 01 04	non-infectious offensive waste – human healthcare non-infectious gypsum wastes (for example, plaster casts and moulds)
18 01 06*	chemicals consisting of or containing hazardous substances
18 01 07	chemicals other than those mentioned in 18 01 06
18 01 08*	cytotoxic and cytostatic medicines

<b>Table S2.2 Permitted waste types and quantities for incineration plant</b>	
<b>Maximum quantity</b>	<b>6,570 tonnes per year</b>
<b>Waste code</b>	<b>Description</b>
18 01 09	other waste medicines, excluding cytotoxic and cytostatic medicines – human healthcare
<b>18 02</b>	<b>wastes from research, diagnosis, treatment or prevention of disease involving animals</b>
18 02 01	non-infectious sharps, not contaminated with chemicals or medicines
18 02 02*	infectious waste, not contaminated with chemicals or medicines (may contain sharps) infectious anatomical waste, not chemically preserved infectious gypsum wastes (for example, plaster casts and moulds)
18 02 02* and 18 02 05* or 18 02 06	infectious waste, contaminated with chemicals infectious anatomical waste, chemically preserved
18 02 02* and 18 02 07* or 20 01 31*	infectious waste, contaminated with cytotoxic and cytostatic medicines (may contain sharps)
18 02 02* and 18 02 08	infectious waste, medicinally contaminated (not cytotoxic or cytostatic) (may contain sharps)
18 02 03	non-infectious anatomical waste, not chemically preserved non-infectious offensive waste non-infectious gypsum wastes (for example, plaster casts and moulds)
18 02 03 and 18 02 05*	non-infectious anatomical waste, chemically preserved, hazardous chemicals
18 02 03 and 18 02 06	non-infectious anatomical waste, chemically preserved, non-hazardous chemicals
18 02 07*	cytotoxic and cytostatic medicines
18 02 08	other waste medicines, excluding cytotoxic and cytostatic
<b>20</b>	<b>Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	Paper and cardboard (Confidential materials including paper, cardboard and clothes)
20 01 31*	Cytotoxic and cytostatic medicines
20 01 32	Medicines other than those mentioned in 20 01 31
20 01 99	non-infectious offensive waste – municipal, separately collected fractions not from healthcare or research-related sources non-infectious sharps, not contaminated with chemicals or medicines – not from healthcare or research-related sources
<b>20 02</b>	<b>garden and park wastes (including cemetery waste)</b>
20 02 01	biodegradable waste

<b>Table S2.3 Permitted waste types and quantities for off-site transfer</b>	
<b>Maximum quantity</b>	<b>The maximum throughput of the transfer operation shall not exceed 80 tonnes per day.</b> <b>The maximum throughput of dental and x-ray waste shall not exceed 850 tonnes per annum.</b>
<b>Waste code</b>	<b>Description</b>
<b>09</b>	<b>WASTES FROM THE PHOTOGRAPHIC INDUSTRY</b>
<b>09 01</b>	<b>Wastes from the photographic industry</b>
09 01 01*	Water-based developer and activator solutions (limited to photographic wastes arising from healthcare and/or related research)
09 01 02*	Water-based offset plate developer solutions (limited to photographic wastes arising from healthcare and/or related research)
09 01 03*	Solvent-based developer solutions (limited to photographic wastes arising from healthcare and/or related research)
09 01 04*	Fixer solutions (limited to photographic wastes arising from healthcare and/or related research)
09 01 05*	Bleach solutions and bleach fixer solutions (limited to photographic wastes arising from healthcare and/or related research)
09 01 07	Photographic film and paper containing silver or silver compounds (limited to photographic wastes arising from healthcare and/or related research)
09 01 08	Photographic film and paper free of silver or silver compounds (limited to photographic wastes arising from healthcare and/or related research)
<b>15</b>	<b>WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</b>
<b>15 01</b>	<b>Packaging (including separately collected municipal packaging waste)</b>
15 01 04	lead foils from dental care
15 01 10*	Packaging containing residues of or contaminated by hazardous substances
<b>18</b>	<b>WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care)</b>
<b>18 01</b>	<b>Wastes from natal care, diagnosis, treatment or prevention of disease in humans</b>
18 01 01	non-infectious sharps, not contaminated with chemicals or medicines
18 01 01 and 18 01 09	non-infectious sharps from vaccines delivered in mass vaccination centres, in the community and in care homes
18 01 02	non-infectious anatomical waste, not chemically preserved
18 01 02 and 18 01 06*	non-infectious anatomical waste, chemically preserved, hazardous chemicals
18 01 02 and 18 01 07	non-infectious anatomical waste, chemically preserved, non-hazardous chemicals
18 01 03*	infectious waste, not contaminated with chemicals or medicines (may contain sharps) infectious anatomical waste, not chemically preserved infectious gypsum wastes (for example, plaster casts and moulds)



<b>Table S2.3 Permitted waste types and quantities for off-site transfer</b>	
<b>Maximum quantity</b>	<b>The maximum throughput of the transfer operation shall not exceed 80 tonnes per day.</b> <b>The maximum throughput of dental and x-ray waste shall not exceed 850 tonnes per annum.</b>
<b>Waste code</b>	<b>Description</b>
18 01 03* and 18 01 06* or 18 01 07	infectious waste, contaminated with chemicals infectious anatomical waste, chemically preserved
18 01 03* and 18 01 08* or 20 01 31*	infectious waste, contaminated with cytotoxic and cytostatic medicines – (may contain sharps)
18 01 03* and 18 01 09	infectious waste, medicinally contaminated (not cytotoxic or cytostatic) – (may contain sharps) sharps from vaccinations delivered in hospitals or GP surgeries
18 01 04	non-infectious offensive waste – human healthcare non-infectious gypsum wastes (for example, plaster casts and moulds)
18 01 06*	chemicals consisting of or containing hazardous substances
18 01 07	chemicals other than those mentioned in 18 01 06
18 01 08*	cytotoxic and cytostatic medicines
18 01 09	other waste medicines, excluding cytotoxic and cytostatic medicines – human healthcare
<b>18 02</b>	<b>Wastes from research, diagnosis, treatment or prevention of disease involving animals</b>
18 02 01	non-infectious sharps, not contaminated with chemicals or medicines
18 02 02*	infectious waste, not contaminated with chemicals or medicines (may contain sharps) infectious anatomical waste, not chemically preserved infectious gypsum wastes (for example, plaster casts and moulds)
18 02 02* and 18 02 05* or 18 02 06	infectious waste, contaminated with chemicals infectious anatomical waste, chemically preserved
18 02 02* and 18 02 07* or 20 01 31*	infectious waste, contaminated with cytotoxic and cytostatic medicines (may contain sharps)
18 02 02* and 18 02 08	infectious waste, medicinally contaminated (not cytotoxic or cytostatic) (may contain sharps)
18 02 03	non-infectious anatomical waste, not chemically preserved non-infectious offensive waste non-infectious gypsum wastes (for example, plaster casts and moulds)
18 02 03 and 18 02 05*	non-infectious anatomical waste, chemically preserved, hazardous chemicals
18 02 03 and 18 02 06	non-infectious anatomical waste, chemically preserved, non-hazardous chemicals

<b>Table S2.3 Permitted waste types and quantities for off-site transfer</b>	
<b>Maximum quantity</b>	<b>The maximum throughput of the transfer operation shall not exceed 80 tonnes per day.</b> <b>The maximum throughput of dental and x-ray waste shall not exceed 850 tonnes per annum.</b>
<b>Waste code</b>	<b>Description</b>
18 02 07*	cytotoxic and cytostatic medicines
18 02 08	other waste medicines, excluding cytotoxic and cytostatic
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>Separately collected fractions (except 15 01)</b>
20 01 31*	Cytotoxic and cytostatic medicines
20 01 32	Medicines other than those mentioned in 20 01 31
20 01 99	non-infectious offensive waste – municipal, separately collected fractions not from healthcare or research-related sources  non-infectious sharps, not contaminated with chemicals or medicines – not from healthcare or research-related sources

<b>Table S2.4 Permitted waste types for light compaction (AR8)</b>	
<b>Maximum quantity</b>	<b>10 tonnes per day</b>
<b>18</b>	<b>WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (EXCEPT KITCHEN AND RESTAURANT WASTES NOT ARISING FROM IMMEDIATE HEALTH CARE)</b>
<b>18 01</b>	<b>wastes from natal care, diagnosis, treatment or prevention of disease in humans</b>
18 01 04	non-infectious offensive waste – human healthcare
<b>18 02</b>	<b>wastes from research, diagnosis, treatment or prevention of disease involving animals</b>
18 02 03	non-infectious offensive waste
<b>20</b>	<b>Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 99	non-infectious offensive waste – municipal, separately collected fractions not from healthcare or research-related sources

## Schedule 3 – Emissions and monitoring

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard(s) or method(s)</b>
A1 (as shown on site plan in schedule 7)	Particulate matter	Incineration exhaust gases via main stack	30 mg/m <sup>3</sup>	½-hr average	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Particulate matter	Incineration exhaust gases via main stack	5 mg/m <sup>3</sup>	daily average	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Total Organic Carbon (TOC)	Incineration exhaust gases via main stack	20 mg/m <sup>3</sup>	½-hr average	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Total Organic Carbon (TOC)	Incineration exhaust gases via main stack	10 mg/m <sup>3</sup>	daily average	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Hydrogen chloride	Incineration exhaust gases via main stack	60 mg/m <sup>3</sup>	½-hr average	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Hydrogen chloride	Incineration exhaust gases via main stack	8 mg/m <sup>3</sup>	daily average	Continuous	EN 14181

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard(s) or method(s)</b>
A1 (as shown on site plan in schedule 7)	Hydrogen fluoride	Incineration exhaust gases via main stack	1 mg/m <sup>3</sup>	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	CEN TS 17340
A1 (as shown on site plan in schedule 7)	Carbon monoxide	Incineration exhaust gases via main stack	150 mg/m <sup>3</sup>	95% of all 10-minute averages in any 24-hour period	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Carbon monoxide	Incineration exhaust gases via main stack	50 mg/m <sup>3</sup>	daily average	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Sulphur dioxide	Incineration exhaust gases via main stack	200 mg/m <sup>3</sup>	½-hr average	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Sulphur dioxide	Incineration exhaust gases via main stack	40 mg/m <sup>3</sup>	daily average	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Incineration exhaust gases via main stack	400 mg/m <sup>3</sup>	½-hr average	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	Incineration exhaust gases via main stack	180 mg/m <sup>3</sup>	daily average	Continuous	EN 14181

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard(s) or method(s)</b>
A1 (as shown on site plan in schedule 7)	Cadmium & thallium and their compounds (total)	Incineration exhaust gases via main stack	0.02 mg/m <sup>3</sup>	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	BS EN 14385
A1 (as shown on site plan in schedule 7)	Mercury and its compounds	Incineration exhaust gases via main stack	0.02 mg/m <sup>3</sup>  Limit does not apply if continuous monitoring has been specified by the Environment Agency	Average of three consecutive measurements of at least 30 minutes each	Bi-annually  Not required if continuous monitoring has been specified by the Environment Agency	BS EN 13211
A1 (as shown on site plan in schedule 7)	Mercury and its compounds	Incineration exhaust gases via main stack	0.02 mg/m <sup>3</sup>	Daily average	Continuous Not required unless continuous monitoring has been specified in writing by the Environment Agency	EN 14181
A1 (as shown on site plan in schedule 7)	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	Incineration exhaust gases via main stack	0.3 mg/m <sup>3</sup>	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	BS EN 14385

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard(s) or method(s)</b>
A1 (as shown on site plan in schedule 7)	Exhaust gas temperature	Incineration exhaust gases via main stack	No limit set	-	Continuous	Traceable to national standards
A1 (as shown on site plan in schedule 7)	Exhaust gas pressure	Incineration exhaust gases via main stack	No limit set	-	Continuous	Traceable to national standards
A1 (as shown on site plan in schedule 7)	Exhaust gas flow	Incineration exhaust gases via main stack	No limit set	-	Continuous	BS EN 16911-2
A1 (as shown on site plan in schedule 7)	Exhaust gas oxygen content	Incineration exhaust gases via main stack	No limit set	-	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Exhaust gas water vapour content	Incineration exhaust gases via main stack	No limit set	-	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Ammonia (NH <sub>3</sub> )	Incineration exhaust gases via main stack	15 mg/m <sup>3</sup>	daily average	Continuous	EN 14181

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1 (as shown on site plan in schedule 7)	Nitrous oxide (N <sub>2</sub> O)	Incineration exhaust gases via main stack	No limit set	½-hr average and daily average	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Carbon dioxide	Incineration exhaust gases via main stack	No limit set	Continuous	Continuous	EN 14181
A1 (as shown on site plan in schedule 7)	Dioxins / furans (I-TEQ)	Incineration exhaust gases via main stack	0.06 ng/m <sup>3</sup>  and  0.08 ng/m <sup>3</sup> if long term limit is specified by the Environment Agency in line with sampling protocol	periodic over minimum 6 hours, maximum 8 hour period  and  value over sampling period of 2 to 4 weeks for long term sampling	Bi-annually from 03/12/2023  and  long term sampling if specified by the Environment Agency in line with sampling protocol	EN 1948 Parts 1, 2 and 3  and CEN TS 1948-5 if specified by the Environment Agency in line with sampling protocol

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard(s) or method(s)</b>
A1 (as shown on site plan in schedule 7)	Dioxin-like PCBs (WHO-TEQ Humans / Mammals, Fish, Birds)	Incineration exhaust gases via main stack	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually	EN 1948 Parts 1, 2 and 4
A1 (as shown on site plan in schedule 7)	Dioxins / furans (WHO-TEQ Humans / Mammals, Fish, Birds)	Incineration exhaust gases via main stack	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually	BS EN 1948 Parts 1, 2 and 3
A1 (as shown on site plan in schedule 7)	Polybrominated dibenzo-dioxins and furans	Incineration exhaust gases via main stack	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually Not required unless wastes containing brominated flame retardants are burned	Method based on procedural requirements of EN 1948
A1 (as shown on site plan in schedule 7)	Specific individual polycyclic aromatic hydrocarbons (PAHs), as specified in Schedule 6.	Incineration exhaust gases via main stack	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Annually	BS ISO 11338 Parts 1 and 2.
A2 (as shown on site plan in schedule 7)	No parameters set	Incineration exhaust gases via the Emergency Relief Vent	No limit set	-	-	-



**Table S3.1(a) Point source emissions to air during abnormal operation of incineration plant – emission limits and monitoring requirements**

<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A1 (as shown on site plan in schedule 7)	Particulate matter	Incineration exhaust gases via main stack	150 mg/m <sup>3</sup>	½-hr average	Continuous	EN 14181 or alternative surrogate as agreed in writing with the environment agency during failure of the continuous emission monitor
	Total Organic Carbon (TOC)	Incineration exhaust gases via main stack	20 mg/m <sup>3</sup>	½-hr average	Continuous	
	Carbon monoxide	Incineration exhaust gases via main stack	150 mg/m <sup>3</sup>	95% of all 10-minute averages in any 24-hour period	Continuous	

<b>Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site- emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. Unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
S1 (as shown on site plan in schedule 7)	Boiler blow-down, wastewater from waste container washing system, domestic sewage, ash quench wastewater and firefighting water (as required)	No parameters set	No limits set	-	-	-

<b>Table S3.3 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
As identified in the Application	Wind Speed and Direction	Continuous	Anemometer	
Location close to the Combustion Chamber inner wall or as identified and justified in Application.	Temperature (° C)	Continuous	Traceable to national standards	As agreed in writing with the Agency.
Incineration plant	Boiler efficiency	within 6 months of any modification that significantly affects energy efficiency	Performance test at full load or other method as agreed in writing with the Environment Agency	

<b>Table S3.4 Residue quality</b>					
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Limit</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method *</b>	<b>Other specifications</b>
Bottom Ash	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'
Bottom Ash	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.		Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	
Bottom Ash	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions		Before use of a new disposal or recycling route	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	
APC Residues	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.		Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	

<b>Table S3.4 Residue quality</b>					
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Limit</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method *</b>	<b>Other specifications</b>
APC Residues	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions		Before use of a new disposal or recycling route	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	

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

## Schedule 4 – Reporting

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

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Emissions to air Parameters as required by condition 3.6.1.	A1	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
TOC or otherwise as agreed in writing with the Environment Agency  Parameters as required by condition 3.6.1	Bottom Ash	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.6.1	Bottom Ash	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.6.1	Bottom Ash	Before use of a new disposal or recycling route	
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.6.1	APC Residues	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.6.1	APC Residues	Before use of a new disposal or recycling route	

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

<b>Table S4.2: Annual production/treatment</b>	
<b>Parameter</b>	<b>Units</b>
Total waste transferred off site	tonnes
Electrical energy generated	KWh
Total electrical energy generated	KWhrs
Electrical energy exported	KWhrs
Electrical energy utilised by the installation	KWhrs
Waste heat utilised by the installation	KWhrs
Energy exported as heat (if any)	KWhrs

<b>Table S4.3 Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Annual Report as required by condition 4.2.2	Annually	-
Electrical imported and used at the installation	Annually	KWh / tonne of waste incinerated
Bottom Ash residue	Annually	Route, tonnes and tonnes / tonne of waste incinerated
APC residue	Annually	Route, tonnes and tonnes / tonne of waste incinerated
Urea / ammonia consumption	Annually	Kg / tonne of waste incinerated
Activated Carbon consumption	Annually	Kg / tonne of waste incinerated
Lime consumption	Annually	Kg / tonne of waste incinerated
Water consumption	Annually	Kg / tonne of waste incinerated
Frequency of emergency relief vent operation	Annual	Number of events per annum
Periods of abnormal operation	Annually	No of occasions and cumulative hours for current calendar year for each line.

<b>Table S4.4 Reporting forms</b>		
<b>Media/parameter</b>	<b>Reporting format</b>	<b>Date of form</b>
Annual report required by condition 4.2.2	Annual performance report template	-
Emissions to air from 03/12/2023	Forms air 1-9 or other forms as agreed in writing by the Environment Agency	08/01/2024
Residue quality	Form residue 1 and 2 or other form as agreed in writing by the Environment Agency	08/01/2024

# Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

## Part A

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

<b>(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution</b>	
<b>To be notified within 24 hours of detection</b>	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Measures taken, or intended to be taken, to stop the emission	

<b>Time periods for notification following detection of a breach of a limit</b>	
<b>Parameter</b>	<b>Notification period</b>

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

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

## Part B – to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

\* authorised to sign on behalf of the operator

## Schedule 6 – Interpretation

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

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

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

“APC residues” means air pollution control residues

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

“authorised officer” means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

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

“Bottom Ash” means ash discharged from the rotating kiln primary chamber.

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

“CEM” Continuous emission monitor

“CEN” means Comité Européen de Normalisation

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

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

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

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

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

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

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

‘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; or otherwise as agreed in writing with the Environment Agency after completion of IC11.

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

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

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

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

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

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

‘Hazardous property’ has the meaning in Annex III of the Waste Framework Directive

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

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

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

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

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

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

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

“ISO” means International Standards Organisation.

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

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

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

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

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

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

“offensive waste” is waste that:

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

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

“PCB” means Polychlorinated Biphenyl. Dioxin-like PCBs are the non-ortho and mono-ortho PCBs listed in the table below.

“Pests” means Birds, Vermin and Insects.

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

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

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

“repackaging” is:

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

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

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

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

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

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

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

'Waste code' means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk

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

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

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

- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content
- (c) in relation to gases from incineration plants other than those burning waste oil, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry,
- (d) where hazardous wastes are burned in plant covered by Schedule 13 of Environmental Permitting Regulations and the emissions of pollutants are reduced by gas treatment, standardisation of the gas with respect to oxygen content shall be carried out only if the oxygen concentration measured over the same period exceeds the relevant oxygen content defined in conditions (a) – (c) above. In other cases, the measured emissions shall be standardised only for moisture, pressure and temperature.

For dioxins/furans and dioxin-like PCBs the determination of the toxic equivalence concentration (I-TEQ, & WHO-TEQ for dioxins/furans, WHO-TEQ for dioxin-like PCBs) stated as a release limit and/ or reporting requirement, the mass concentrations of the following congeners have to be multiplied with their respective toxic equivalence factors before summing. When reporting on measurements of dioxins/furans and dioxin-like PCBs, the toxic equivalence concentrations should be reported as a range based on: all congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum. However the minimum value should be used when assessing compliance with the emission limit value in table S3.1.

<b>TEF schemes for dioxins and furans</b>				
<b>Congener</b>	<b>I-TEF</b>	<b>WHO-TEF</b>		
	<b>1990</b>	<b>2005</b>	<b>1997/8</b>	
		<b>Humans / Mammals</b>	<b>Fish</b>	<b>Birds</b>
<b>Dioxins</b>				
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	-	-
<b>Furans</b>				
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

TEF schemes for dioxins and furans				
Congener	I-TEF	WHO-TEF		
	1990	2005	1997/8	
2,3,4,7,8-PeCDF	0.5	0.3	0.5	1
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,7,8,9-HxCDF	0.1	0.1	0.1	0.1
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1	0.1
2,3,4,6,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,4,6,7,8-HpCDF	0.01	0.01	0.01	0.01
1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.01	0.01
OCDF	0.001	0.0003	0.0001	0.0001

TEF schemes for dioxin-like PCBs			
Congener	WHO-TEF		
	2005	1997/8	
	Humans / mammals	Fish	Birds
<b>Non-ortho PCBs</b>			
3,4,4',5-TCB (81)	0.0001	0.0005	0.1
3,3',4,4'-TCB (77)	0.0003	0.0001	0.05
3,3',4,4',5 - PeCB (126)	0.1	0.005	0.1
3,3',4,4',5,5'-HxCB(169)	0.03	0.00005	0.001
<b>Mono-ortho PCBs</b>			
2,3,3',4,4'-PeCB (105)	0.00003	<0.000005	0.0001
2,3,4,4',5-PeCB (114)	0.00003	<0.000005	0.0001
2,3',4,4',5-PeCB (118)	0.00003	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.00003	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.00003	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.00003	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00003	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.00003	<0.000005	0.00001

“year” means calendar year ending 31 December.

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

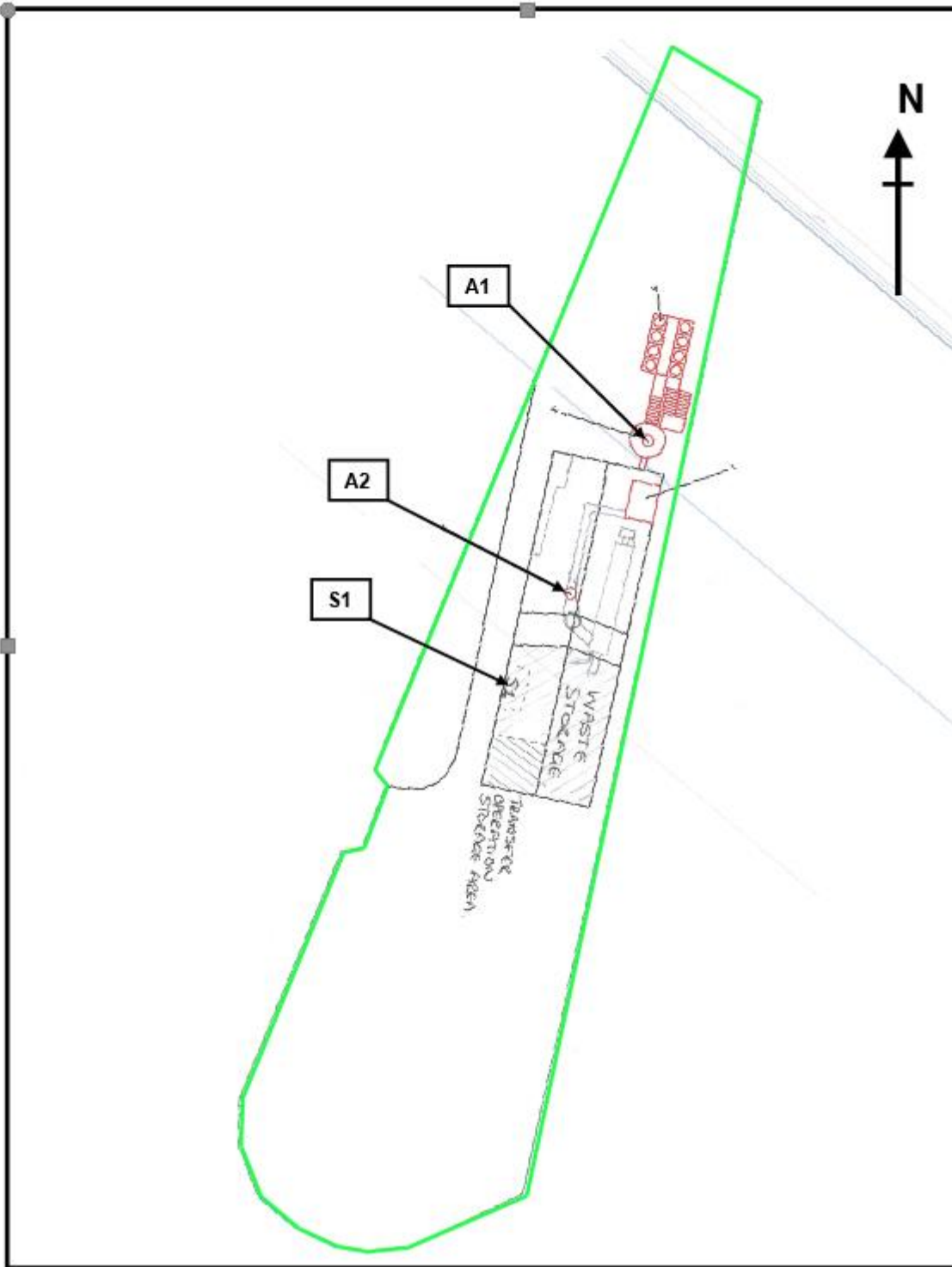
'transition metals' means any of the following metals: any compound of scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum, as well as these materials in metallic form, as far as these are classified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