Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

London Energy Limited

Edmonton Ecopark
Advent Way
Edmonton
London
N18 3AG

Variation application number

EPR/LB3301H/V002

Permit number

EPR/LB3301HL

Edmonton Ecopark
Permit number EPR/LB3301HL

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

Energy recovery plant

The relevant listed Part A(1) activity for the incinerator is Section 5.1 Part A(1)(b), the incineration of non-hazardous waste in a waste incineration plant with a capacity exceeding 3 tonnes per hour. This incineration activity will be located on the northern section of the site.

The incineration activity will generate electricity using residual waste as a fuel. The activity will comprise two process lines, each with a capacity of 350,000 tonnes per annum. The lines will utilise moving grate technology with an associated heat recovery boiler, flue gas treatment plant and stack.

The waste derived fuels, consisting of municipal solid waste (MSW) and commercial and industrial waste including some non-hazardous clinical waste will be delivered to site by road, and also from the on-site recycling and fuel preparation facility. Incoming waste will be stored indoors within the waste reception and processing buildings.

A separate waste reception area and loading system will accept small quantities of non-hazardous clinical waste. The clinical waste will arrive in sealed bags and containers and be conveyed directly to the waste feed hoppers.

Combustible waste is transferred to the incinerator either directly from refuse collection vehicles or via internal transfers via dedicated vehicles from the fuel preparation facility. Air from the building enclosing the waste bunker is extracted and used as combustion air within the incinerators. When the incinerators are not operational a carbon filter odour control unit will treat the extracted air prior to discharge.

Combustion gases are then passed through a boiler to raise steam, which is utilised within a steam turbine to generate a maximum of 78MWe electricity.

Combustion gases will be cleaned before they are released to atmosphere. There are several components to the flue gas cleaning and abatement as follows.

- Acid gases removal (lime injection or equivalent) or scrubbing;
- Heavy metal, dioxins and furans removal (carbon injection or equivalent);
- Particulate matter removal (bag filter plant or equivalent);

- Urea / ammonia injection prior to a catalyst for reduction of oxides of nitrogen (Selective Catalytic Reduction); and
- Polishing wet scrubbing system.

Cleaned flue gases are discharged to atmosphere through a 100 metre tall stack. Exhaust flue gases will be continuously monitored for particulates, oxides of nitrogen, sulphur dioxide, carbon monoxide, total organic carbon and hydrogen chloride. Monitoring for heavy metals, dioxins and hydrogen fluoride will be carried out periodically.

Foul and trade effluent will be collected on site and discharged to public sewer. As well as sewage from staff welfare facilities, the discharge from the incineration activity will include small quantities of process effluent such as boiler blowdown and wastewaters from water demineralisation.

The incineration process results in several waste streams including bottom ash; fly ash; and air pollution control residues (APCr) from the flue gas treatment process; and non-combustible materials from the mechanical treatment plant. These materials will be temporarily stored on site prior to recovery or disposal in a suitably licensed off-site facility.

Two diesel engines with an aggregated capacity of 4MWe will provide emergency electrical power to the plant in the event of supply interruption.

The permit sets conditions controlling the management, operation and the control of emissions from the incineration activity, including the monitoring and reporting of emissions to all environmental media.

Wastewater treatment plant

A wastewater treatment plant (WWTP) Part A(1) activity will also be located on the northern part of the EcoPark site. This facility will be designed to treat a number of liquid effluents and wastewater streams prior to discharge to sewer. The anticipated effluent flows to the WWTW will include boiler blowdown, effluent from the demineralisation water plant, gully waste and wastewater from wash down areas.

The WWTP will consist of a physico-chemical treatment system including settlement, removal of solids, chemical dosing and final polishing with carbon filters or sand filters. The WWTP will discharge to sewer under consent from Thames Water.

The final design of the WWTW including the listed activity under which it will operate will be confirmed during the design phase. This following activities are listed within the permit to over the WWTP operation:

Section 5.4 Part A(1)(a)(ii) - Disposal or recovery of non-hazardous waste in a plant with a capacity exceeding 50 tonnes per day.

Section 5.3 Part A(1)(a)(ii) - Disposal or recovery of hazardous waste in a plant with a capacity exceeding 10 tonnes per day.

Resource Recovery Facility

The southern part of the regulated facility is made up of two distinct areas covering the operation of a recycling and fuel preparation facility and a resource recovery centre, both waste operations.

Recycling and fuel preparation facility

The recycling and fuel preparation facility (RFPF) will consist of a large building with a concrete floor with a capacity to manage approximately 378,000 tonnes of waste annually. It will consist of an enclosed reception hall with sorting, preparation and storage areas located in the southern area of the EcoPark. There will be discrete areas for the reception and bulking of different material streams, for example; trade waste, residual waste, bulky waste and green waste.

Manual or mechanical sorting from picking belts will remove recyclables, oversize and incombustible wastes. Wastes suitable for incineration such as portions of trade waste, residual waste and oversized combustible wastes will be shredded.

Waste that is suitable for combustion after pre-treatment will be treated and transferred to the waste bunker of the incinerator via the internal road system or removal via road to an alternative licenced facility. Bulky waste and residual waste containing materials suitable for recycling will be moved to the sorting line where it will be sorted and stored for removal from site for additional processing or recycling.

A carbon filter odour control unit will extract air from RFPF building.

Dewatering of gully waste will take place in a dedicated area with an approximate throughput of 4,000 tonnes of waste annually. Gravity separation of entrained liquids to a drainage system via an interceptor to the site wastewater treatment plant.

Reuse and Recycling centre

The reuse and recycling centre (RRC) will receive waste from the general public and small traders. The RRC will handle approximately 8,000 tonnes of waste per year. The RRC will comprise a main reception area with sufficient space for the circulation of vehicles and pedestrians, parking areas and direct access to dedicated containers for hand unloading of recyclable materials and residual waste.

The RRC will be covered and the public area elevated above the operational area for users to deposit waste into containers or bays over a safety barrier. The majority of full containers will be sent off site to a suitably licensed third party operator for recycling, reuse or reprocessing.

Wastes suitable for incineration such as portions of trade waste and oversized combustible wastes will be transferred to the RFPF for shredding.

The surface water drainage system for surface water run-off will discharge via oil interceptors to Enfield Ditch.

To the north of the EcoPark are a number of industrial and commercial premises beyond which lies a Waste Water Treatment Plant. The Lee Valley Regional Park is located to the east of the EcoPark. The A406 North Circular Road is located to the south beyond which are retail and trading estates. To the West is Salmon's Brook watercourse. The nearest residential properties are approximately 500m to the east and 600m to the west of the proposed main stack.

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

The main features of the incineration plant as follows:

Furnace technology	Moving Grate
Number of lines	2
Principal waste type	Municipal /commercial & industrial
Stack height	100m
Permitted plant capacity	700,000 tonnes per year
Electrical generation capacity	78MWe

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

Status log of the permit		
Description	**Date**	**Comments**
Application EPR/LB3301HL/A001	Duly made 07/03/16	Application for a new bespoke permit authorising an incineration activity, a waste water treatment plant and three waste activities.
Response to Schedule 5 notice dated 19/04/16	25/05/16	Additional information relating to noise, air quality, fire risk, odour and waste management
Response to Schedule 5 notice dated 15/08/16	06/09/16	Additional information relating to emissions to air and energy efficiency
Response to Schedule 5 notice dated 19/12/16	25/01/17	Additional information relating to waste acceptance, treatment and water abstraction.
Additional information received	08/02/17	Additional information relating to waste types and waste storage capacity.
Additional information received	14/03/17	Additional information relating to waste types.
Permit determined EPR/LB3301HL/A001	16/06/17	Permit determined and issued to North London Waste Authority.
Application EPR/LB3301H/V002 (variation and consolidation)	Duly made 13/03/19	Application to increase electrical output, increase site boundary and include additional surface water discharge points.
Variation determined EPR/LB3301HL	13/05/19	Consolidated permit issued.
Regulation 61 notice issued	10/12/2021	Regulation 61 Notice requiring information for Statutory review of permit. BAT Conclusions published 03 December 2019.
EPR/UP3232AC/T001	25/05/22	transfer
Regulation 61 notice issued	25/11/2022	
Regulation 61 notice response	26/06/2023	
Variation issued EPR/LB3301H/V002	30/11/2023	

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/LB3301HL

Issued to

London Energy Limited ("the operator")

whose registered office is

Ecopark
Advent Way
Edmonton London
N18 3AG

company registration number 02732548

to operate a regulated facility at

Edmonton Ecopark
Advent Way
Edmonton
London
N18 3AG

The notice shall take effect from 30/11/2023

Name	Date
Anne Lloyd	**30/11/2023**

Authorised on behalf of the Environment Agency

Schedule 1

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

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/LB3301HL

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/LB3301H/V002 authorising,

London Energy Limited ("the operator"),

whose registered office is

Ecopark
Advent Way
Edmonton London
N18 3AG

company registration number 02732548

to operate an installation

Edmonton Ecopark
Advent Way
Edmonton
London
N18 3AG

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

Name	Date
Anne Lloyd	**30/11/2023**

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

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

(b) using sufficient competent persons and resources.

(c) referenced in schedule 1, table S1.1 (AR1) from 03/12/2023, in accordance with a written other than normal operating conditions (OTNOC) management plan.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 The operator shall review the written management system at least every 3 years or otherwise as requested by the Environment Agency.

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

1.1.5 The operator shall comply with the requirements of an approved competence scheme [or other approval issued by the Environment Agency.

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

1.2.3 The operator shall review the viability of Combined Heat and Power (CHP) implementation at least every 4 years, or in response to any of the following factors, whichever comes sooner:

(a) new plans for significant developments within 15 km of the installation;

(b) changes to the Local Plan;

(c) changes to the UK CHP Development Map or similar; and

(d) new financial or fiscal incentives for CHP.

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

1.3 Efficient use of raw materials

1.3.1 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.

2.2 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(s) S2.2, S2.3, S2.4

(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 Waste shall not be charged if:

(a) the combustion chamber temperature is below 850 ^{o}C,

(b) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded during abnormal operation; or

(c) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than during abnormal operation; or

(d) 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

(e) there is a stoppage, disturbance or failure of the activated carbon abatement system, other than during abnormal operation.

(f) 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 detailed in the application or as agreed in writing with the Environment Agency, are used to demonstrate compliance with those emission limit values.

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

2.3.10 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.

2.3.11 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.

(d) Any other technically unavoidable stoppage, disturbance, or failure of the plant which could lead to an exceedance of an emission limit value in table S3.1.

2.3.12 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;

2.3.13 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 2.3.8 is maintained as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.3.8 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.

2.3.14 Bottom ash and APC residues shall not be mixed.

2.4 Improvement programme

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

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

2.5 Pre-operational conditions

2.5.1 The activities shall not be brought into operation until l the measures specified in schedule 1 table S1.4A have been completed].

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.

3.1.2 The limits given in schedule 3, subject to condition 3.2.1, shall not be exceeded.

3.1.3 Wastes produced at the site shall, as a minimum, be sampled and analysed in accordance with schedule 3 table S 3.5. Additional samples shall be taken and tested and appropriate action taken, whenever:

(a) disposal or recovery routes change; or

(b) it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

3.2 Emissions limits and monitoring for emission to air for incineration plant

3.2.1 The limits for emissions to air apply as follows:

(a) The limits in table S3.1 shall not be exceeded except during periods of abnormal operation.

(b) The limits in table S3.1 (a) shall not be exceeded during abnormal operation.

3.2.2 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3 table S3.1 and S3.1(a); the Continuous Emission Monitors shall be used such that;

(a) the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed the following percentages of the emission limit values:

- Carbon monoxide 10%
- Sulphur dioxide 20%
- Oxides of nitrogen (NO & NO_2 expressed as NO_2) 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) the average of valid half hourly averages or 10 minute averages over a calendar day excluding half hourly averages or 10 minute averages during periods of abnormal operation. The daily average value shall be considered valid if no more than five half-hourly average or fifteen 10-minute average values in any day have been determined not to be valid;

(e) no more than ten daily average values per year shall be determined not to be valid.

3.3 Emissions of substances not controlled by emission limits

3.3.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.3.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;

(b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.3.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3.4 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.4 Odour

3.4.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

3.4.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;

(b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Noise and vibration

3.5.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

3.5.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;

(b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.6 Monitoring

3.6.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

(a) point source emissions specified in tables S3.1, S3.1(a), S3.2, S3.3;

(b) process monitoring specified in table S3.4;

(c) residue quality in table S3.5

3.6.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing by the Environment Agency. Newly installed CEMs, or CEMs replacing existing CEMs, shall have MCERTS certification and unless otherwise agreed in writing by the Environment Agency have an MCERTS certified range which is not greater than 1.5 times the daily emission limit value (ELV) specified in schedule 3 table S3.1. The CEM shall also be able to measure instantaneous values over the ranges which are to be expected during all operating conditions. If it is necessary to use more than one range setting of the CEM to achieve this requirement, the CEM shall be verified for monitoring supplementary, higher ranges. Newly installed Data handling and acquisition systems (DAHS), or DAHS replacing existing DAHS, shall have MCERTS certification.

3.6.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.1(a), S3.2, S3.3 unless otherwise agreed in writing by the Environment Agency.

3.7 Pests

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

3.7.2 The operator shall:

(a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;

(b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.8 Fire prevention

3.8.1 The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.

3.8.2 The operator shall:

(a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;

(b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

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

(a) be legible;

(b) be made as soon as reasonably practicable;

(c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and

(d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:

(i) off-site environmental effects; and

(ii) matters which affect the condition of the land and groundwater.

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

4.2 Reporting

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

4.2.2 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.

4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

(a) any change in the operator's trading name, registered name or registered office address; and

(b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

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

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

(b) any steps taken with a view to the dissolution of the operator.

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

(a) the Environment Agency shall be notified at least 14 days before making the change; and

(b) the notification shall contain a description of the proposed change in operation..

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

4.4 Interpretation

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

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

Schedule 1 – Operations

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity**	**Limits of specified activity**
AR1	S5.1 A1 (b)	The incineration of non hazardous waste in a waste incineration plant with a capacity of 3 tonnes per hour or more.	From receipt of waste to emission of exhaust gas and removal from site of waste arising. Waste types and quantities as specified in Table S2.2 of this permit.
AR2	S5.3 A1 (1)(a)(ii) Or Section S5.4 A(1)(a)(ii)	Disposal or recovery of hazardous waste with a capacity exceeding ten tonnes per day involving physico- chemical treatment. Disposal of non hazardous waste with a capacity exceeding 50 tonnes per day involving physico- chemical treatment	Operation of an effluent treatment plant from receipt of effluent to discharge to sewer. No input of incinerator bottom ash leachate to the effluent treatment plant.
	Directly Associated Activities		
AR3	Electricity Generation	Generation of 78 MWe electrical power using a steam turbine 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
AR4	Back up diesel engines	Use of two diesel engines with an aggregated capacity of 4MWe for providing emergency electrical power to the plant in the event of supply interruption.	Emergency use to a maximum of 500 hours operation per year. Maximum of 50 hours testing per year.
AR5	Abstraction of water from Deephams Sewage Treatment Works outfall	Abstraction of water via a pumping system for use as process waters following appropriate treatment.	A meter to measure quantities of water abstracted must be in place and must be maintained, repaired or replaced as required to ensure that accurate measurements are recorded at all times.

Waste Activities			
AR6	Recycling and fuel preparation facility	D15: storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) D14: Repackaging prior to submission to any of the operations numbered D1 to D13 R3: Recycling/reclamation of organic substances which are not used as solvents R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic materials	Receipt, storage and treatment of waste received at the recycling and fuel preparation facility. Treatment consisting only of manual sorting and separation to remove recyclable, oversize and incombustible wastes. Only wastes suitable for incineration will be shredded. Treatment by shredding for recovery only. Storage of hazardous waste for activities AR6 and AR8 aggregated is limited to less than 50 tonnes at any one time. Waste types as specified in table S2.3 and S2.4.
AR7	Gully waste management	Dewatering of non-hazardous gully waste. R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) R3: Recycling/reclamation of organic substances which are not used as solvents D15: storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced	Treatment consisting only of sorting, separation and de-watering of non-hazardous gully waste with a capacity of less than 50 tonnes per day. From receipt of gully waste to dispatch of waste to incineration plant or an alternative treatment / disposal option and discharge of effluent to wastewater treatment plant. Waste types and quantities as specified in table S2.5
AR8	Household and trade recycling recovery centre (reuse and recycling centre)	D15: storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced	Receipt, storage and treatment of waste received at the household waste recycling centre (reuse and recycling centre) through to transfer to the incineration activity or transfer offsite for recovery or disposal.

		R13: Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) D14: Repackaging prior to submission to any of the operations numbered D1 to D13 D9: Physico-chemical treatment not specified elsewhere in Annex IIA which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D8 and D10 to D12 R3: Recycling/reclamation of organic substances which are not used as solvents R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic materials	Treatment consisting only of manual sorting and separation of waste into different components for disposal or recovery. Transfer of wastes suitable for incineration such as portions of trade waste and oversized combustible wastes to the RFPF for shredding. No more than 50 tonnes per day of non-hazardous waste to be treated for disposal. Storage of hazardous waste for activities AR6 and AR8 aggregated is limited to less than 50 tonnes at any one time. Waste types and quantities as specified in table S2.6

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application EPR/UP3232AC/A001	• Parts B2 and B3 of the Application Form including technical standards listed in Table 3a of form B3. • The Supporting Information documents referenced: o *Final Report 15568i2* excluding all references to wet flue gas treatment. o Appendix B - Site Report o Appendix E - EMS certification o Appendix I - Furnace type BAT assessment o Appendix J, Part 1 – Design of ERF Plant excluding all references to wet flue gas treatment. o Appendix J, Part 2 – Bunker design and capacity o Appendix J, Part 3 – ERF Process Design excluding all references to wet flue gas treatment. o Appendix J, Part 4 – ERF Process Design excluding all references to wet flue gas treatment.	Duly Made 07/03/16

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
	○ Appendix J, Part 5 - Odour control strategy ○ Appendix L - Competence • Response to Not Duly Made email questions 2 - 5 covering the following: ○ Question 2 - Revised noise assessment ○ Question 3 - 5 - Air quality.	
Response to Schedule 5 Notice dated 19/04/16, EPR/UP3232AC/A001	• Response to Schedule 5 questions 1 - 6 covering the following: ○ Question 1 - Waste acceptance ○ Question 2 - Waste treatment ○ Question 3 - Odour ○ Question 4 - Fire risk ○ Question 5 - Effluent treatment ○ Question 6 - Noise	25/05/16
Response to Schedule 5 Notice dated 19/04/16, EPR/UP3232AC/A001	• Fire Strategy V3.1 dated 12/08/15 • ERF Fire Safety Strategy dated 14 June 2015	25/05/16
Response to Schedule 5 Notice dated 15/08/16, EPR/UP3232AC/A001	• Technical note 16338i2 • CHP Development strategy	06/09/16
Response to Schedule 5 Notice dated 19/12/16, EPR/UP3232AC/A001	• Response to Schedule 5 questions 1 - 6 covering the following: ○ Questions 1 - 4: Waste acceptance ○ Question 5 - Waste treatment ○ Question 6 - Water abstraction	25/01/17
Additional information received	Information relating to waste types and waste storage capacity.	08/02/17
Application EPR/UP3232AC/V002	Responses to Part C2 and C3 of the application form and referenced supporting documentation.	06/12/18
Additional information received	Additional information including: ○ Drainage plans for surface water discharge points W2, W3 and W4 (references: NP-WOD-XXXX-B01-DR-DR-06_001, NP-WOD-XXXX-B01-DR-DR-06_002 and NP-WOD-XXXX-B01-DR-DR-06_003)	10/04/19
Response to regulation 61 notice	Operating techniques as set out in the response to the regulation 61 notice.	26/06/2023

Table S1.3 Improvement programme requirements		
Reference	**Improvement measure**	**Completion date**
IC1A	The Operator shall submit a written report to the Environment Agency on the implementation of the resource recovery facility Environmental Management System and the progress made in the certification of the system by an	Within 12 months of the completion of commissioning of the resource recovery facility.

	external body or if appropriate submit a schedule by which the EMS will be certified.	
IC1B	The Operator shall submit a written report to the Environment Agency on the implementation of the energy recovery facility Environmental Management System and the progress made in the certification of the system by an external body or if appropriate submit a schedule by which the EMS will be certified.	Within 12 months of the date on which waste is first burnt.
IC2	The Operator shall submit a written proposal to the Environment Agency to carry out tests to determine the size distribution of the particulate matter in the exhaust gas emissions to air from emission point A1 and A2, identifying the fractions within the PM_{10}, and $PM_{2.5}$ ranges. The proposal shall include a timetable for approval by the Environment Agency to carry out such tests and produce a report on the results. On receipt of written agreement by the Environment Agency to the proposal and the timetable, the Operator shall carry out the tests and submit to the Environment Agency a report on the results.	Within 6 months of the completion of commissioning of the energy recovery facility.
IC3A	The Operator shall submit a written report to the Environment Agency on the commissioning of the resource recovery facility. The report shall summarise the environmental performance of the plant as installed against the design parameters set out in the Application. The report shall also include a review of the performance of the facility against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions.	Within 4 months of the completion of commissioning of the resource recovery facility.
IC3B	The Operator shall submit a written report to the Environment Agency on the commissioning of the energy recovery facility. The report shall summarise the environmental performance of the plant as installed against the design parameters set out in the Application. The report shall also include a review of the performance of the facility against the conditions of this permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions.	Within 4 months of the completion of commissioning of the energy recovery facility.
IC4	The Operator shall carry out checks to verify the residence time, minimum temperature and oxygen content of the exhaust gases in the furnace whilst operating under the anticipated most unfavourable operating conditions. The results shall be submitted in writing to the Environment Agency.	Within 4 months of the completion of commissioning of the energy recovery facility.
IC5	The Operator shall submit a written report to the Environment Agency describing the performance and optimisation of the Selective Catalytic Reduction (SCR) system and combustion settings to minimise oxides of nitrogen (NO_x) emissions within the emission limit values described in this permit with the minimisation of nitrous oxide emissions. The report shall include an assessment of the level of NO_x and N_2O emissions that can be achieved under optimum operating conditions. The report shall also provide details of the optimisation (including dosing rates) for the control of acid gases and dioxins.	Within 4 months of the completion of commissioning of the energy recovery facility.

IC6	The Operator shall submit a written summary report to the Agency to confirm by the results of calibration and verification testing that the performance of Continuous Emission Monitors for parameters as specified in Table S3.1 and Table S3.1(a) complies with the requirements of BS EN 14181, specifically the requirements of QAL1, QAL2 and QAL3.	Initial calibration report to be submitted to the Agency within 3 months of completion of commissioning of the energy recovery facility. Full summary evidence compliance report to be submitted within 18 months of commissioning of the energy recovery facility.
IC7	The operator shall submit a drainage plan to the Environment Agency to confirm the routes of both foul effluent, "domestic" effluent and surface water run off/discharge.	Within 3 months of the site being commissioned and fully operational.
IC8	The operator shall carry out a programme of dioxin and dioxin like PCB monitoring over a period and frequency agreed with the Environment Agency. The operator shall submit a report to the Environment Agency with an analysis of whether dioxin emissions can be considered to be stable.	Within 6 months of completion of commissioning or as agreed in writing with the Environment Agency
IC9	The operator shall carry out a programme of mercury monitoring over a period and frequency agreed with the Environment Agency. The operator shall submit a report to the Environment Agency with an analysis of whether the waste feed to the plant can be proven to have a low and stable mercury content.	Within 6 months of completion of commissioning or as agreed in writing with the Environment Agency

Table S1.4 Pre-operational measures		
Reference	**Operation**	**Pre-operational measures**
PO1A	Resource recovery facility (AR6, AR7, AR8)	Prior to the commencement of commissioning of the resource recovery facility, the Operator shall send a summary of the site Environment Management System (EMS) to the Environment Agency and make available for inspection all documents and procedures which form part of the EMS including operational procedures relevant to the energy recovery facility. The EMS shall be developed in line with the requirements set out in Environment Agency web guide on developing a management system for environmental permits (found on www.gov.uk). The documents and procedures set out in the EMS shall form the written management system referenced in condition 1.1.1 (a) of the permit.
PO1B	Energy recovery facility (AR1)	Prior to the commencement of commissioning of the energy recovery facility, the Operator shall send a summary of the site Environment Management System (EMS) to the Environment Agency and make available for inspection all documents and procedures which form part of the EMS including operational procedures relevant to the energy recovery facility. The EMS shall be developed in line with the requirements set out in Environment Agency web guide on developing a management system for environmental permits (found on www.gov.uk). The documents and procedures set out in the EMS shall form the written management system referenced in condition 1.1.1 (a) of the permit.

Table S1.4 Pre-operational measures		
Reference	**Operation**	**Pre-operational measures**
PO2	Energy recovery facility (AR1)	Prior to the commencement of construction, the Operator shall send a report to the Environment Agency which will contain a comprehensive review of the options available for utilising the heat generated by the waste incineration process in order to ensure that it is recovered as far as practicable. The review shall detail any identified proposals for improving the recovery and utilisation of waste heat and shall provide a timetable for their implementation.
PO3	Energy recovery facility (AR1)	Prior to the commencement of commissioning, the Operator shall submit to the Environment Agency for approval a protocol for the sampling and testing of incinerator bottom ash for the purposes of assessing its hazard status. Sampling and testing shall be carried out in accordance with the protocol as approved.
PO4A	Resource recovery facility (AR6, AR7, AR8)	Prior to the commencement of commissioning of the resource recovery facility; the Operator shall provide a written commissioning plan, including timelines for completion, for approval by the Environment Agency. The commissioning plan shall include the expected emissions to the environment during the different stages of commissioning, the expected durations of commissioning activities and the actions to be taken to protect the environment and report to the Environment Agency in the event that actual emissions exceed expected emissions. Commissioning shall be carried out in accordance with the commissioning plan as approved.
PO4B	Energy recovery facility (AR1)	Prior to the commencement of commissioning of the energy recovery facility; the Operator shall provide a written commissioning plan, including timelines for completion, for approval by the Environment Agency. The commissioning plan shall include the expected emissions to the environment during the different stages of commissioning, the expected durations of commissioning activities and the actions to be taken to protect the environment and report to the Environment Agency in the event that actual emissions exceed expected emissions. Commissioning shall be carried out in accordance with the commissioning plan as approved.
PO5A	Resource recovery facility (AR6, AR7, AR8)	Prior to the commencement of commissioning of the resource recovery facility, the Operator shall submit a written report to the Agency detailing the waste acceptance procedure to be used at the site. The waste acceptance procedure shall include the process and systems by which wastes unsuitable for incineration at the site will be controlled. The procedure shall be implemented in accordance with the written approval from the Environment Agency.
PO5B	Energy recovery facility (AR1)	Prior to the commencement of commissioning of the energy recovery facility, the Operator shall submit a written report to the Agency detailing the waste acceptance procedure to be used at the site. The waste acceptance procedure shall include the process and systems by which wastes unsuitable for incineration at the site will be controlled. The procedure shall be implemented in accordance with the written approval from the Environment Agency.
PO6	Energy recovery facility (AR1)	After completion of furnace design and at least three calendar months before any furnace operation; the operator shall submit a written report to the Agency of the details of the

Table S1.4 Pre-operational measures		
Reference	**Operation**	**Pre-operational measures**
		computational fluid dynamic (CFD) modelling. The report shall demonstrate whether the design combustion conditions comply with the residence time and temperature requirements as defined by Chapter IV of the IED.
PO7A	Resource recovery facility	Prior to the commencement of commissioning, the Operator shall submit a report on the baseline conditions of soil and groundwater at the installation. The report shall contain the information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definitive cessation of activities provided for in Article 22(3) of the IED. The report shall contain information, supplementary to that already provided in application Site Condition Report, needed to meet the information requirements of Article 22(2) of the IED.
PO7B	Energy recovery facility (AR1)	Prior to the commencement of commissioning, the Operator shall submit a report on the baseline conditions of soil and groundwater at the installation. The report shall contain the information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definitive cessation of activities provided for in Article 22(3) of the IED. The report shall contain information, supplementary to that already provided in application Site Condition Report, needed to meet the information requirements of Article 22(2) of the IED.
PO8	Any part of the installation	The Operator shall submit the written protocol referenced in condition 3.2.4 for the monitoring of soil and groundwater for approval by the Environment Agency. The protocol shall demonstrate how the Operator will meet the requirements of Articles 14(1)(b), 14(1)(e) and 16(2) of the IED. The procedure shall be implemented in accordance with the written approval from the Agency.
PO9	Energy recovery facility (AR1)	At least three months before operation, the Operator shall submit a written report to the Environment Agency specifying arrangements for continuous and periodic monitoring of emissions to air to comply with Environment Agency guidance notes M1 and M2. The report shall include the following: • Plant and equipment details, including accreditation to MCERTS • Methods and standards for sampling and analysis Details of monitoring locations, access and working platforms
PO10A	Resource recovery facility (AR6, AR7, AR8)	The operator shall submit a written report to the Environment Agency demonstrating how the site meets the relevant criteria set out within the Environment Agency's Fire Prevention Plan guidance. The report shall be submitted to the Environment Agency for approval.
PO10B	Energy recovery facility (AR1)	The operator shall submit a written report to the Environment Agency demonstrating how the site meets the relevant criteria set out within the Environment Agency's Fire Prevention Plan guidance. The report shall be submitted to the Environment Agency for approval.

Table S1.4 Pre-operational measures		
Reference	**Operation**	**Pre-operational measures**
PO11	Energy recovery facility (AR1)	At least 6 months prior to construction of the Energy Recovery Facility the operator shall submit a report to the Environment Agency providing detailed designs for the proposed flue gas treatment system and obtain the Environment Agency's written approval to it. The report shall include but is not limited to the following considerations: 1) that the final design will meet the requirements of BAT; 2) that the application still accurately reflects the final operating proposals; and 3) that the environmental impact assessment still accurately reflects the predicted impacts from the proposal. The operator shall submit a written report to the Environment Agency for approval, 6 months prior to construction, detailing the findings of this review.
PO12A	Resource recovery facility (AR6, AR7, AR8)	The operator shall submit an odour management plan (OMP) to the Environment Agency demonstrating how emissions of odour will be either prevented or where this is not practicable, minimised in line with Environment Agency guidance H4. The OMP shall be submitted to the Environment Agency for approval.
PO12B	Energy recovery facility (AR1)	The operator shall submit a written odour management plan (OMP) to the Environment Agency for approval. The OMP should demonstrate how emissions of odour will be either prevented or where this is not practicable, minimise odour in line with Environment Agency guidance H4.
PO13	Waste water treatment plant (AR2)	The operator shall submit a report to the Environment Agency providing detailed designs for the waste water treatment plant. The operator shall undertake a review of the final detailed design prior to installation to ensure that: 1) the final design will meet the requirements of BAT; and 2) the predicated emissions from the proposal will not result in an unacceptable deterioration of the receiving waters. This shall be supported by a risk assessment using the Environment Agency's H1 screening tool The operator shall submit a written report to the Environment Agency for approval, 6 months prior to construction, detailing the findings of this review.
PO14	Gully waste management	The operator shall submit a report to the Environment Agency outlining the results of the characterisation of both the liquid and solid fractions of gully waste using samples taken from existing sites and / or published research. The analysis shall include but is not limited to the following parameters: • Hydrocarbons, metals, BOD and COD. Based on the characterisation results the operator shall outline how the wastewater treatment plant will be designed to treat the gully waste to a achieve levels of pollutant that will result in no unacceptable environmental impact on the environment in line with the Environment Agency's H1 guidance.

Table S1.4 Pre-operational measures		
Reference	**Operation**	**Pre-operational measures**
		The operator shall submit a written report to the Environment Agency for approval, 6 months prior to construction of the gulley waste management facility, detailing the findings of this review.

Schedule 2 – Waste types, raw materials and fuels

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

Table S2.2 Permitted waste types and quantities for input to incineration plant (Activity Reference AR1)	
Maximum quantity	**700,000 tonnes total waste input per annum including: 500 tonnes of non-hazardous clinical waste**
Waste code	**Description**
03	**Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard**
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
04	**Wastes from the leather, fur and textile industries**
04 02	**wastes from the textile industry**
04 02 09	wastes from composite materials (impregnated textile, elastomer, plastomer)
04 02 10	organic matter from natural products (for example grease, wax)
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
15	**Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 09	textile packaging
15 02	**absorbents, filter materials, wiping cloths and protective clothing**
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
17	**Construction and demolition wastes (including excavated soil from contaminated sites)**
17 02	**wood, glass and plastic**
17 02 01	wood
17 02 03	plastic
17 09	**other construction and demolition wastes**

Table S2.2 Permitted waste types and quantities for input to incineration plant (Activity Reference AR1)	
Maximum quantity	**700,000 tonnes total waste input per annum including: 500 tonnes of non-hazardous clinical waste**
Waste code	**Description**
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
18	**Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)**
18 01	**wastes from natal care, diagnosis, treatment or prevention of disease in humans**
18 01 04 **Note 1**	wastes whose collection and disposal is not subject to special requirements in order to prevent infection (for example dressings, plaster casts, linen, disposable clothing, diapers)
19 02	**wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)**
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 05	**wastes from aerobic treatment of solid wastes**
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 01	paper and cardboard
19 12 04	plastic and rubber
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 10	combustible waste (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 25	edible oil and fat
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 30	detergents other than those mentioned in 20 01 29
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics

Table S2.2 Permitted waste types and quantities for input to incineration plant (Activity Reference AR1)	
Maximum quantity	**700,000 tonnes total waste input per annum including: 500 tonnes of non-hazardous clinical waste**
Waste code	**Description**
20 01 41	wastes from chimney sweeping
20 01 99	other fractions not otherwise specified
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste
20 02 03	other non-biodegradable wastes
20 03	**other municipal wastes**
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 99	municipal wastes not otherwise specified
Note 1	All non-hazardous clinical waste to be input directly to the waste feed hoppers of the incineration plant.

Table S2.3 Permitted waste types and quantities for input to the recycling and fuel preparation facility for onward transfer only (no treatment) (Activity Reference AR6)	
Maximum quantity	**374,000 tonnes total waste input per annum for S2.3 and S2.4**
Waste code [Note 1]	**Description**
01	**Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals**
01 01	**wastes from mineral excavation**
01 01 01	wastes from mineral metalliferous excavation
01 01 02	wastes from mineral non-metalliferous excavation
01 03	**wastes from physical and chemical processing of metalliferous minerals**
01 03 06	tailings other than those mentioned in 01 03 04 and 01 03 05
01 03 09	red mud from alumina production other than the wastes mentioned in 01 03 10
01 04	**wastes from physical and chemical processing of non-metalliferous minerals**
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
01 04 11	wastes from potash and rock salt processing other than those mentioned in 01 04 07
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 04 13	wastes from stone cutting and sawing other than those mentioned in 01 04 07
02	**Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing**
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 10	waste metal

Table S2.3 Permitted waste types and quantities for input to the recycling and fuel preparation facility for onward transfer only (no treatment) (Activity Reference AR6)	
Maximum quantity	**374,000 tonnes total waste input per annum for S2.3 and S2.4**
Waste code [Note 1]	**Description**
02 02	**wastes from the preparation and processing of meat, fish and other foods of animal origin**
02 02 04	sludges from on-site effluent treatment
02 04	**wastes from sugar processing**
02 04 01	soil from cleaning and washing beet
02 04 02	off-specification calcium carbonate
02 05	**wastes from the dairy products industry**
02 05 01	materials unsuitable for consumption or processing
02 07	**wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)**
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials
06	**Wastes from inorganic chemical processes**
06 09	**wastes from the MSFU of phosphorous chemicals and phosphorous chemical processes**
06 09 02	phosphorous slag
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03
06 11	**wastes from the manufacture of inorganic pigments and opacificiers**
06 11 01	calcium-based reaction wastes from titanium dioxide production
10	**Wastes from thermal processes**
10 01	**wastes from power stations and other combustion plants (except 19)**
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)
10 01 05	calcium-based reaction wastes from flue-gas desulphurisation in solid form
10 01 07	calcium-based reaction wastes from flue-gas desulphurisation in sludge form
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 24	sands from fluidised beds
10 02	**wastes from the iron and steel industry**
10 02 01	wastes from the processing of slag
10 02 02	unprocessed slag
10 02 08	solid wastes from gas treatment other than those mentioned in 10 02 07
10 02 10	mill scales
10 02 14	sludges and filter cakes from gas treatment other than those mentioned in 10 02 13
10 02 15	other sludges and filter cakes
10 03	**wastes from aluminium thermal metallurgy**
10 03 02	anode scraps
10 03 05	waste alumina

Table S2.3 Permitted waste types and quantities for input to the recycling and fuel preparation facility for onward transfer only (no treatment) (Activity Reference AR6)	
Maximum quantity	**374,000 tonnes total waste input per annum for S2.3 and S2.4**
Waste code [Note 1]	**Description**
10 03 16	skimmings other than those mentioned in 10 03 15
10 03 18	carbon-containing wastes from anode manufacture other than those mentioned in 10 03 17
10 03 24	solid wastes from gas treatment other than those mentioned in 10 03 23
10 03 26	sludges and filter cakes from gas treatment other than those mentioned in 10 03 25
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27
10 03 30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03 29
10 04	**wastes from lead thermal metallurgy**
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09
10 05	**wastes from zinc thermal metallurgy**
10 05 01	slags from primary and secondary production
10 05 09	wastes from cooling-water treatment other than those mentioned in 10 05 08
10 05 11	dross and skimmings other than those mentioned in 10 05 10
10 06	**wastes from copper thermal metallurgy**
10 06 01	slags from primary and secondary production
10 06 02	dross and skimmings from primary and secondary production
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09
10 07	**wastes from silver, gold and platinum thermal metallurgy**
10 07 01	slags from primary and secondary production
10 07 02	dross and skimmings from primary and secondary production
10 07 03	solid wastes from gas treatment
10 07 05	sludges and filter cakes from gas treatment
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
10 08	**wastes from other non-ferrous thermal metallurgy**
10 08 09	other slags
10 08 11	dross and skimmings other than those mentioned in 10 08 10
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
10 09	**wastes from casting of ferrous pieces**
10 09 03	furnace slag
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05

Table S2.3 Permitted waste types and quantities for input to the recycling and fuel preparation facility for onward transfer only (no treatment) (Activity Reference AR6)	
Maximum quantity	**374,000 tonnes total waste input per annum for S2.3 and S2.4**
Waste code Note 1	**Description**
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 09 16	waste crack-indicating agent other than those mentioned in 10 09 15
10 10	**wastes from casting of non-ferrous pieces**
10 10 03	furnace slag
10 10 06	casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05
10 10 08	casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07
10 10 16	waste crack-indicating agent other than those mentioned in 10 10 15
10 11	**wastes from manufacture of glass and glass products**
10 11 03	waste glass-based fibrous materials
10 11 10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 09
10 11 12	waste glass other than those mentioned in 10 11 11
10 11 16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15
10 11 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 11 17
10 12	**wastes from manufacture of ceramic goods, bricks, tiles and construction products**
10 12 01	waste preparation mixture before thermal processing
10 12 05	sludges and filter cakes from gas treatment
10 12 06	discarded moulds
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 12 10	solid wastes from gas treatment other than those mentioned in 10 12 09
10 12 12	wastes from glazing other than those mentioned in 10 12 11
10 13	**wastes from manufacture of cement, lime and plaster and articles and products made from them**
10 13 01	waste preparation mixture before thermal processing
10 13 04	wastes from calcination and hydration of lime
10 13 07	sludges and filter cakes from gas treatment
10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 09
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12
10 13 14	waste concrete and concrete sludge
11	**Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydro-metallurgy**

Table S2.3 Permitted waste types and quantities for input to the recycling and fuel preparation facility for onward transfer only (no treatment) (Activity Reference AR6)	
Maximum quantity	**374,000 tonnes total waste input per annum for S2.3 and S2.4**
Waste code [Note 1]	**Description**
11 01	**wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)**
11 01 10	sludges and filter cakes other than those mentioned in 11 01 09
11 01 14	degreasing wastes other than those mentioned in 11 01 13
11 02	**wastes from non-ferrous hydrometallurgical processes**
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05
11 05	**wastes from hot galvanising processes**
11 05 01	hard zinc
11 05 02	zinc ash
12	**Wastes from shaping and physical and mechanical surface treatment of metals and plastics**
12 01	**wastes from shaping and physical and mechanical surface treatment of metals and plastics**
12 01 01	ferrous metal filings and turnings
12 01 02	ferrous metal dust and particles
12 01 03	non-ferrous metal filings and turnings
12 01 04	non-ferrous metal dust and particles
12 01 13	welding wastes
12 01 17	waste blasting material other than those mentioned in 12 01 16
12 01 21	spent grinding bodies and grinding materials other than those mentioned in 12 01 20
15	**Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 07	glass packaging
16	**Wastes not otherwise specified in the list**
16 01	**end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)**
16 01 03	end-of-life tyres
16 01 06	end-of-life vehicles, containing neither liquids nor other hazardous components
16 01 17	ferrous metal
16 01 18	non-ferrous metal
16 01 20	glass
16 02	**wastes from electrical and electronic equipment**
16 02 11*	discarded equipment containing chlorofluorocarbons, HCFC, HFC
16 02 14	discarded equipment other than those mentioned in 16 02 09 to 16 02 13

Table S2.3 Permitted waste types and quantities for input to the recycling and fuel preparation facility for onward transfer only (no treatment) (Activity Reference AR6)	
Maximum quantity	**374,000 tonnes total waste input per annum for S2.3 and S2.4**
Waste code Note 1	**Description**
16 02 16	components removed from discarded equipment other than those mentioned in 16 02 15
16 03	**off-specification batches and unused products**
16 03 04	inorganic wastes other than those mentioned in 16 03 03
16 05	**gases in pressure containers and discarded chemicals**
16 05 05	gases in pressure containers other than those mentioned in 16 05 04
16 06	**batteries and accumulators**
16 06 04	alkaline batteries (except 16 06 03)
16 06 05	other batteries and accumulators
16 11	**waste linings and refractories**
16 11 02	carbon-based linings and refractories from metallurgical processes others than those mentioned in 16 11 01
16 11 04	other linings and refractories from metallurgical processes other than those mentioned in 16 11 03
16 11 06	linings and refractories from non-metallurgical processes others than those mentioned in 16 11 05
17	**Construction and demolition wastes (including excavated soil from contaminated sites)**
17 01	**concrete, bricks, tiles and ceramics**
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	**wood, glass and plastic**
17 02 02	glass
17 04	**metals (including their alloys)**
17 04 01	copper, bronze, brass
17 04 02	aluminium
17 04 03	lead
17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 11	cables other than those mentioned in 17 04 10
17 05	**soil (including excavated soil from contaminated sites), stones and dredging spoil**
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05

Table S2.3 Permitted waste types and quantities for input to the recycling and fuel preparation facility for onward transfer only (no treatment) (Activity Reference AR6)	
Maximum quantity	**374,000 tonnes total waste input per annum for S2.3 and S2.4**
Waste code [Note 1]	**Description**
17 05 07*	track ballast containing hazardous substances
17 05 08	track ballast other than those mentioned in 17 05 07
17 06	**insulation materials and asbestos-containing construction materials**
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 08	**gypsum-based construction material**
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
17 09	**other construction and demolition wastes**
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
18	**Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)**
18 01	**wastes from natal care, diagnosis, treatment or prevention of disease in humans**
18 01 01	sharps (except 18 01 03)
18 02	**wastes from research, diagnosis, treatment or prevention of disease involving animals**
18 02 01	sharps (except 18 02 02)
19	**Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use**
19 01	**wastes from incineration or pyrolysis of waste**
19 01 02	ferrous materials removed from bottom ash
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 01 18	pyrolysis wastes other than those mentioned in 19 01 17
19 01 19	sands from fluidised beds
19 02	**wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)**
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 04	**vitrified waste and wastes from vitrification**
19 04 01	vitrified waste
19 05	**wastes from aerobic treatment of solid wastes**
19 05 03	off-specification compost
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 02	ferrous metal
19 12 03	non-ferrous metal
19 12 05	glass
19 12 09	minerals (for example sand, stones)

Table S2.3 Permitted waste types and quantities for input to the recycling and fuel preparation facility for onward transfer only (no treatment) (Activity Reference AR6)	
Maximum quantity	**374,000 tonnes total waste input per annum for S2.3 and S2.4**
Waste code [Note 1]	**Description**
19 13	**wastes from soil and groundwater remediation**
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 02	glass
20 01 23*	discarded equipment containing chlorofluorocarbons
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 30	detergents other than those mentioned in 20 01 29
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 40	metals
20 02	**garden and park wastes (including cemetery waste)**
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
20 03	**other municipal wastes**
20 03 04	septic tank sludge
20 03 06	waste from sewage cleaning
Table notes	
Note 1	**No asbestos waste to be accepted.**

Table S2.4 Permitted waste types and quantities for input to the recycling and fuel preparation facility for treatment or onward transfer (Activity Reference AR6)	
Maximum quantity	**374,000 tonnes total waste input per annum for waste tables S2.3 and S2.4**
Waste code[Note 1]	**Description**
02	**Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing**
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 02	animal-tissue waste
02 01 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site
02 01 07	wastes from forestry
02 02	**wastes from the preparation and processing of meat, fish and other foods of animal origin**
02 02 02	animal-tissue waste

Table S2.4 Permitted waste types and quantities for input to the recycling and fuel preparation facility for treatment or onward transfer (Activity Reference AR6)	
Maximum quantity	**374,000 tonnes total waste input per annum for waste tables S2.3 and S2.4**
Waste code[Note 1]	**Description**
02 02 03	materials unsuitable for consumption or processing
02 03	**wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation**
02 03 04	materials unsuitable for consumption or processing
02 06	**wastes from the baking and confectionery industry**
02 06 01	materials unsuitable for consumption or processing
02 06 02	wastes from preserving agents
02 07	**wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)**
02 07 02	wastes from spirits distillation
02 07 04	materials unsuitable for consumption or processing
03	**Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard**
03 01	**wastes from wood processing and the production of panels and furniture**
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood
03 03 07	mechanically separated rejects from pulping of waste paper and cardboard
03 03 08	wastes from sorting of paper and cardboard destined for recycling
04	**Wastes from the leather, fur and textile industries**
04 01	**wastes from the leather and fur industry**
04 01 08	waste tanned leather (blue sheetings, shavings, cuttings, buffing dust) containing chromium
04 01 09	wastes from dressing and finishing
04 02	**wastes from the textile industry**
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
07	**Wastes from organic chemical processes**
07 02	**wastes from the MFSU of plastics, synthetic rubber and man-made fibres**
07 02 13	waste plastic
09	**Wastes from the photographic industry**
09 01	**wastes from the photographic industry**
09 01 07	photographic film and paper containing silver or silver compounds
09 01 08	photographic film and paper free of silver or silver compounds
09 01 10	single-use cameras without batteries

Table S2.4 Permitted waste types and quantities for input to the recycling and fuel preparation facility for treatment or onward transfer (Activity Reference AR6)	
Maximum quantity	**374,000 tonnes total waste input per annum for waste tables S2.3 and S2.4**
Waste code[Note 1]	**Description**
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
10	**Wastes from thermal processes**
10 09	**wastes from casting of ferrous pieces**
10 09 14	waste binders other than those mentioned in 10 09 13
10 10	**wastes from casting of non-ferrous pieces**
10 10 14	waste binders other than those mentioned in 10 10 13
12	**Wastes from shaping and physical and mechanical surface treatment of metals and plastics**
12 01	**wastes from shaping and physical and mechanical surface treatment of metals and plastics**
12 01 05	plastics shavings and turnings
15	**Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 09	textile packaging
15 02	**absorbents, filter materials, wiping cloths and protective clothing**
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
16	**Wastes not otherwise specified in the list**
16 01	**end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)**
16 01 15	antifreeze fluids other than those mentioned in 16 01 14
16 01 19	plastic
16 03	**off-specification batches and unused products**
16 03 06	organic wastes other than those mentioned in 16 03 05
17	**Construction and demolition wastes (including excavated soil from contaminated sites)**
17 02	**wood, glass and plastic**
17 02 01	wood
17 02 03	plastic
17 03	**bituminous mixtures, coal tar and tarred products**
17 03 02	bituminous mixtures other than those mentioned in 17 03 01

Table S2.4 Permitted waste types and quantities for input to the recycling and fuel preparation facility for treatment or onward transfer (Activity Reference AR6)	
Maximum quantity	**374,000 tonnes total waste input per annum for waste tables S2.3 and S2.4**
Waste code[Note 1]	**Description**
19	**Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use**
19 05	**wastes from aerobic treatment of solid wastes**
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 01	paper and cardboard
19 12 04	plastic and rubber
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 10	combustible waste (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 01	paper and cardboard
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 25	edible oil and fat
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 41	wastes from chimney sweeping
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste
20 03	**other municipal wastes**
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 03	street-cleaning residues
20 03 07	bulky waste
20 03 99	municipal wastes not otherwise specified
Table notes	
Note 1	**No asbestos waste to be accepted.**

Table S2.5 Permitted waste types and quantities for input to the gully waste management activity (Activity Reference AR7)	
Maximum quantity	**4,000 tonnes waste input per annum of gully waste**
Waste code[Note 1]	**Description**
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 03	**other municipal wastes**
20 03 03	street-cleaning residues

Table S2.6 Permitted waste types and quantities for input to the reuse and recycling centre (Activity Reference AR8)	
Maximum quantity	**8,000 tonnes total waste input per annum**
Waste code	**Description**
13	**Oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19)**
13 02	**waste engine, gear and lubricating oils**
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
13 02 06*	synthetic engine, gear and lubricating oils
13 02 07*	readily biodegradable engine, gear and lubricating oils
15	**Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 07	glass packaging
15 01 09	textile packaging
16	**Wastes not otherwise specified in the list**
16 01	**end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)**
16 01 07*	oil filters
16 01 14*	antifreeze fluids containing hazardous substances
16 01 15	antifreeze fluids other than those mentioned in 16 01 14
16 01 17	ferrous metal
16 01 18	non-ferrous metal
16 01 19	Plastic
16 01 20	glass
16 05	**gases in pressure containers and discarded chemicals**

Table S2.6 Permitted waste types and quantities for input to the reuse and recycling centre (Activity Reference AR8)	
Maximum quantity	**8,000 tonnes total waste input per annum**
Waste code	**Description**
16 05 05	gases in pressure containers other than those mentioned in 16 05 04
17	**Construction and demolition wastes (including excavated soil from contaminated sites)**
17 01	**concrete, bricks, tiles and ceramics**
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	**wood, glass and plastic**
17 02 01	Wood
17 02 02	glass
17 02 03	Plastic
17 05	**soil (including excavated soil from contaminated sites), stones and dredging spoil**
17 05 04	soil and stones other than those mentioned in 17 05 03
17 06	**insulation materials and asbestos-containing construction materials**
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 08	**gypsum-based construction material**
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
17 09	**other construction and demolition wastes**
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
20	**Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions**
20 01	**separately collected fractions (except 15 01)**
20 01 01	paper and cardboard
20 01 02	glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 13*	solvents
20 01 14*	acids
20 01 15*	alkalines
20 01 17*	photochemicals
20 01 19*	pesticides
20 01 21*	fluorescent tubes and other mercury-containing waste
20 01 23*	discarded equipment containing chlorofluorocarbons

Table S2.6 Permitted waste types and quantities for input to the reuse and recycling centre (Activity Reference AR8)	
Maximum quantity	**8,000 tonnes total waste input per annum**
Waste code	**Description**
20 01 25	edible oil and fat
20 01 26*	oil and fat other than those mentioned in 20 01 25
20 01 28	paint, inks, adhesives and resins other than those mentioned in 20 01 27
20 01 30	detergents other than those mentioned in 20 01 29
20 01 33	Batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 35*	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics
20 01 40	metals
20 01 41	wastes from chimney sweeping
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste
20 02 02	soil and stones
20 02 03	other non-biodegradable wastes
20 03	**other municipal wastes**
20 03 01	mixed municipal waste
20 03 02	waste from markets
20 03 07	bulky waste
Table notes	
Note 1	**No asbestos waste to be accepted.**

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard(s) or method(s)**
A1 and A2 as shown in the site plan in schedule 7	Particulate matter	Incineration exhaust gases	30 mg/m^3	½-hr average	Continuous measurement	BS EN 14181
A1 and A2 as shown in the site plan in schedule 7	Particulate matter	Incineration exhaust gases	5mg/m^3	Daily average	Continuous measurement	BS EN 14181
A1 and A2 as shown in the site plan in schedule 7	Total Organic Carbon (TOC)	Incineration exhaust gases	20 mg/m^3	½-hr average	Continuous measurement	BS EN 14181
A1 and A2 as shown in the site plan in schedule 7	Total Organic Carbon (TOC)	Incineration exhaust gases	10 mg/m^3	Daily average	Continuous measurement	BS EN 14181
A1 and A2 as shown in the site plan in schedule 7	Hydrogen chloride	Incineration exhaust gases	60 mg/m^3	½-hr average	Continuous measurement	BS EN 14181
A1 and A2 as shown in	Hydrogen chloride	Incineration exhaust	8mg/m^3	Daily average	Continuous measurement	BS 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)**
the site plan in schedule 7						
A1 and A2 as shown in the site plan in schedule 7	Hydrogen fluoride	Incineration exhaust gases	2 mg/m^3 Or 1 mg/m3	½-hr average Or periodic over a minimum 1- hour period	Continuous measurement Or quarterly in first year. Then bi-annually	BS EN 14181 Or CEN TS 17340
A1 and A2 as shown in the site plan in schedule 7	Carbon monoxide	Incineration exhaust gases	100 mg/m^3	½-hr average	Continuous measurement	BS EN 14181
A1 and A2 as shown in the site plan in schedule 7	Carbon monoxide	Incineration exhaust gases	50 mg/m^3	daily average	Continuous measurement	BS EN 14181
A1 and A2 as shown in the site plan in schedule 7	Sulphur dioxide	Incineration exhaust gases	200 mg/m^3	½-hr average	Continuous measurement	BS EN 14181
A1 and A2 as shown in the site plan in schedule 7	Sulphur dioxide	Incineration exhaust gases	40mg/m^3	daily average	Continuous measurement	BS 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 and A2 as shown in the site plan in schedule 7	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	Incineration exhaust gases	160 mg/m^3	½-hr average	Continuous measurement	BS EN 14181
A1 and A2 as shown in the site plan in schedule 7	Oxides of nitrogen (NO and NO_2 expressed as NO_2)	Incineration exhaust gases	80 mg/m^3	daily average	Continuous measurement	BS EN 14181
A1 and A2 as shown in the site plan in schedule 7	Cadmium & thallium and their compounds (total)	Incineration exhaust gases	0.02 mg/m^3	Periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year, then bi-annual	BS EN 14385
A1 and A2 as shown in the site plan in schedule 7	Mercury and its compounds	Incineration exhaust gases	0.02 mg/m^3 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	Quarterly in first year, then bi-annual	BS EN 13211
A1 and A2 as shown in the site plan in schedule 7	Mercury and its compounds		0.02 mg/m^3	Daily average	Continuous Not required unless continuous monitoring has been specified by the Environment Agency in line with sampling protocol	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 and A2 as shown in the site plan in schedule 7	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	Incineration exhaust gases	0.3 mg/m^3	Periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year, then bi-annual	BS EN 14385
A1 and A2 as shown in the site plan in schedule 7	Ammonia (NH3)	Incineration exhaust gases	15mg/m^3	Daily average	Continuous	EN 14181
A1 and A2 as shown in the site plan in schedule 7	Nitrous Oxide (N2O)	Incineration exhaust gases	No Limit Set	½-hr average and daily average	Continuous	EN 14181
A1 and A2 as shown in the site plan in schedule 7	Exhaust gas temperature	Incineration exhaust gases	No limit set	-	Continuous	Traceable to national standards
A1 and A2 as shown in the site plan in schedule 7	Exhaust gas pressure	Incineration exhaust gases	No limit set	-	Continuous	Traceable to national standards
	Exhaust gas flow	Incineration exhaust gases	No limit set	-	Continuous	BS EN 16911-2

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 and A2 as shown in the site plan in schedule 7	Exhaust gas oxygen content	Incineration exhaust gases	No limit set	-	Continuous	EN 14181
A1 and A2 as shown in the site plan in schedule 7	Exhaust gas water vapour content	Incineration exhaust gases	No limit set	-	Continuous	EN 14181
A1 and A2 as shown in the site plan in schedule 7	Carbon dioxide		No limit set	Continuous	Continuous	EN 14181
A1 and A2 as shown in the site plan in schedule 7	Dioxins / furans (I-TEQ)	Incineration exhaust gases	0.06 ng/m^3 and 0.08 ng/m^3 if long term limit is specified by the Environment Agency in line with sampling protocol	periodic over minimum 6 hours, maximum 8 hour period and value over sampling period of 2 to 4 weeks for long term sampling	Quarterly in first year of operation then bi-annually 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
A1 and A2 as shown in the site plan	Dioxins / furans (WHO-TEQ Humans / Mammals, fish, birds)	Incineration exhaust gases	No limit set	periodic over minimum 6 hours,	Quarterly in first year, then bi-annual	BS EN 1948 Parts 1, 2 and 3

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard(s) or method(s)**
in schedule 7				maximum 8 hour period		
A1 and A2 as shown in the site plan in schedule 7	Dioxin-like PCBs (WHO-TEQ Humans / Mammals, Fish, Birds)	Incineration exhaust gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year, then bi-annual	EN 1948 Parts 1, 2 and 4
A1 and A2 as shown in the site plan in schedule 7	Polybrominated dibenzo-dioxins and furans	Incineration exhaust gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year of operation then Bi-annually	Method based on procedural requirements of EN 1948
A1 and A2 as shown in the site plan in schedule 7	Specific individual poly-cyclic aromatic hydrocarbons (PAHs), as specified in Schedule 6.	Incineration exhaust gases	No limit set	periodic over minimum 6 hours, maximum 8 hour period	annually	BS ISO 11338 Parts 1 and 2.
A3 as shown in the site plan in schedule 7	Carbon Monoxide	Standby engine	No limit set	In line with web guide 'Monitoring stack emissions: low risk MCPs and specified generators' Published 16 February 2021 (formerly known as TGN M5)	Every 1500 hours of operation or once every five years (whichever comes first)	In line with web guide 'Monitoring stack emissions: low risk MCPs and specified generators' Published 16 February 2021 (formerly known as TGN M5)
A4 as shown in the site plan in schedule 7	Carbon Monoxide	Standby engine	No limit set	In line with web guide 'Monitoring stack emissions: low risk MCPs and	Every 1500 hours of operation or once every five years (whichever comes first)	In line with web guide 'Monitoring stack emissions: low risk MCPs and specified generators'

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)**
				specified generators' Published 16 February 2021 (formerly known as TGN M5)		Published 16 February 2021 (formerly known as TGN M5)
A5 as shown in the site plan in schedule 7	No Parameters set	Odour control unit – energy recovery facility	No limit set	-	-	-
A6 as shown in the site plan in schedule 7	No Parameters set	Odour control unit – recycling and fuel preparation facility	No limit set	-	-	-

Table S3.1(a) Point source emissions to air during abnormal operation of incineration plant – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 and A2 as shown in the site plan in schedule 7	Particulate matter	Incineration exhaust gases	150 mg/m^3	½-hr average	Continuous measurement	BS EN 15267-3 during abatement plant failure
A1 and A2 as shown in the site plan in schedule 7	Total Organic Carbon (TOC)	Incineration exhaust gases	20 mg/m^3	½-hr average	Continuous measurement	BS EN 15267-3 during abatement plant failure

Table S3.1(a) Point source emissions to air during abnormal operation of incineration plant – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 and A2 as shown in the site plan in schedule 7	Carbon monoxide	Incineration exhaust gases	100 mg/m^3	½-hr average	Continuous measurement	BS EN 15267-3 during abatement plant failure

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W1 emission to Enfield Ditch via attenuation tanks and interceptors as shown in the site plan at schedule 7	Uncontaminated surface water from roof and roadway	No parameters set	No limit set	-	-	-
W2 emission to Enfield Ditch via attenuation tanks and interceptors as shown in the site plan at schedule 7	Uncontaminated surface water from roof and roadway	No parameters set	No limit set	-	-	-
W3 emission to Salmons Brook via attenuation tanks and interceptors as shown in the site plan at schedule 7	Uncontaminated surface water from roof and roadway	No parameters set	No limit set	-	-	-
W4 emission to Enfield Ditch via attenuation tanks and interceptors as shown in the site plan at schedule 7	Uncontaminated surface water from roof and roadway	No parameters set	No limit set	-	-	-

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. Unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
S1 emission to Chingford Sewer and then to Deephams WWTW as shown in the site plan at schedule	Waste water from treatment of exhaust gases via effluent Treatment plant	Parameters may be agreed in accordance with pre-operational condition PO14	Limits may be agreed in accordance with pre-operational condition PO14	May be agreed in accordance with pre-operational condition PO14	May be agreed in accordance with pre-operational condition PO14	May be agreed in accordance with pre-operational condition PO14

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. Unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
S2 emission to Chingford Sewer and then to Deephams WWTW as shown in the site plan at schedule 7	Domestic effluent from staff amenity blocks	No parameters set	No Limit Set			

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

Table S3.5 Residue quality					
Emission point reference or source or description of point of measurement	**Parameter**	**Limit**	**Monitoring frequency**	**Monitoring standard or method ***	**Other specifications**
Bottom Ash	TOC or otherwise as agreed in writing with the Environment Agency	3% or otherwise as agreed in writing with the Environment Agency	Monthly in the first year of operation. Then 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.		Monthly in the first year of operation. Then 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.		Monthly in the first year of operation. Then Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	

Table S3.5 Residue quality					
Emission point reference or source or description of point of measurement	**Parameter**	**Limit**	**Monitoring frequency**	**Monitoring standard or method ***	**Other specifications**
APC Residues	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions		Before use of a new disposal or recycling route	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	

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

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air Parameters as required by condition 3.5.1	A1, A2	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Emissions to water Parameters as required by condition 3.5.1	S1	As agreed in accordance with pre-operational condition PO13	As agreed in accordance with pre-operational condition PO13
TOC Parameters as required by condition 3.5.1	Bottom Ash	Quarterly (but monthly for the first year of operation)	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 3.5.1	Bottom Ash	Quarterly (but monthly for the first year of operation)	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 3.5.1	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 3.5.1	APC Residues	Quarterly (but monthly for the first year of operation)	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 3.5.1	APC Residues	Before use of a new disposal or recycling route	

Table S4.2: Annual production/treatment	
Parameter	**Units**
Total Municipal Waste Incinerated	tonnes
Total Commercial Waste Incinerated	tonnes
Electrical energy produced	kWh
Thermal energy produced e.g. steam for export	kWh
Electrical energy exported	kWh
Electrical energy used on installation	kWh
Waste heat utilised by the installation	kWh

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Annual Report as required by condition 4.2.2	Annually	-
Electrical energy exported, imported and used at the installation	Annually	kWh / tonne of waste incinerated
Fuel oil consumption	Annually	kg / tonne of waste incinerated
Bottom Ash residue	Annually	Route, tonnes and tonnes / tonne of waste incinerated
APC residue	Annually	Route, tonnes and tonnes / tonne of waste incinerated
Other solid residues	Annually	Route, tonnes and tonnes / tonne of waste incinerated
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
Periods of abnormal operation	Annually	No of occasions and cumulative hours for current calendar year for each line.

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Annual report required by condition 4.2.2	Annual performance report template	30/11/2023
Emissions to air until 02/12/2023	Forms air 1 - air 7 or other forms as agreed in writing by the Environment Agency	16/06/17

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Emissions to air from 03/12/2023	Forms air 1-9 or other forms as agreed in writing by the Environment Agency	30/11/2023
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	30/11/2023
Residue quality	Form residue 1 and 2 or other form as agreed in writing by the Environment Agency	30/11/2023
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	30/11/2023

Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

Part A

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

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

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

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

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

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

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

Part B – to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	

Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

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

“abnormal operation” means: any technically unavoidable stoppages, disturbances, or failures of the plant or the measurement devices. Abnormal operation starts as defined in condition 2.3.11 and ends as defined in condition 2.3.12. Abnormal operation is limited to 4 hours for a single occurrence and a total of 60 hours per year per lin

“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 falling through the grate or transported by the grate

“CEM” Continuous emission monitor

“CEN” means Commité Européen de Normalisation

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

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

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

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

“disposal”. Means any of the operations provided for in Annex I to Directive 2008/98/EC of the European 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 lll of the Waste Framework Directive

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

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.

“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.

“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.

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

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

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

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

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

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

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

(a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or

(b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

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

relation to gases from co-incineration plants the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 6% dry

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

TEF schemes for dioxins and furans				
Congener	**I-TEF**	**WHO-TEF**		
	1990	**2005**	**1997/8**	
		Humans / Mammals	**Fish**	**Birds**
Dioxins				
2,3,7,8-TCDD	1	1	1	1
1,2,3,7,8-PeCDD	0.5	1	1	1
1,2,3,4,7,8-HxCDD	0.1	0.1	0.5	0.05
1,2,3,6,7,8-HxCDD	0.1	0.1	0.01	0.01
1,2,3,7,8,9-HxCDD	0.1	0.1	0.01	0.1
1,2,3,4,6,7,8-HpCDD	0.01	0.01	0.001	<0.001
OCDD	0.001	0.0003	-	-
Furans				
2,3,7,8-TCDF	0.1	0.1	0.05	1
1,2,3,7,8-PeCDF	0.05	0.03	0.05	0.1
2,3,4,7,8-PeCDF	0.5	0.3	0.5	1
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,7,8,9-HxCDF	0.1	0.1	0.1	0.1
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1	0.1
2,3,4,6,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,4,6,7,8_HpCDF	0.01	0.01	0.01	0.01
1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.01	0.01
OCDF	0.001	0.0003	0.0001	0.0001

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

“year” means calendar year ending 31 December.

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

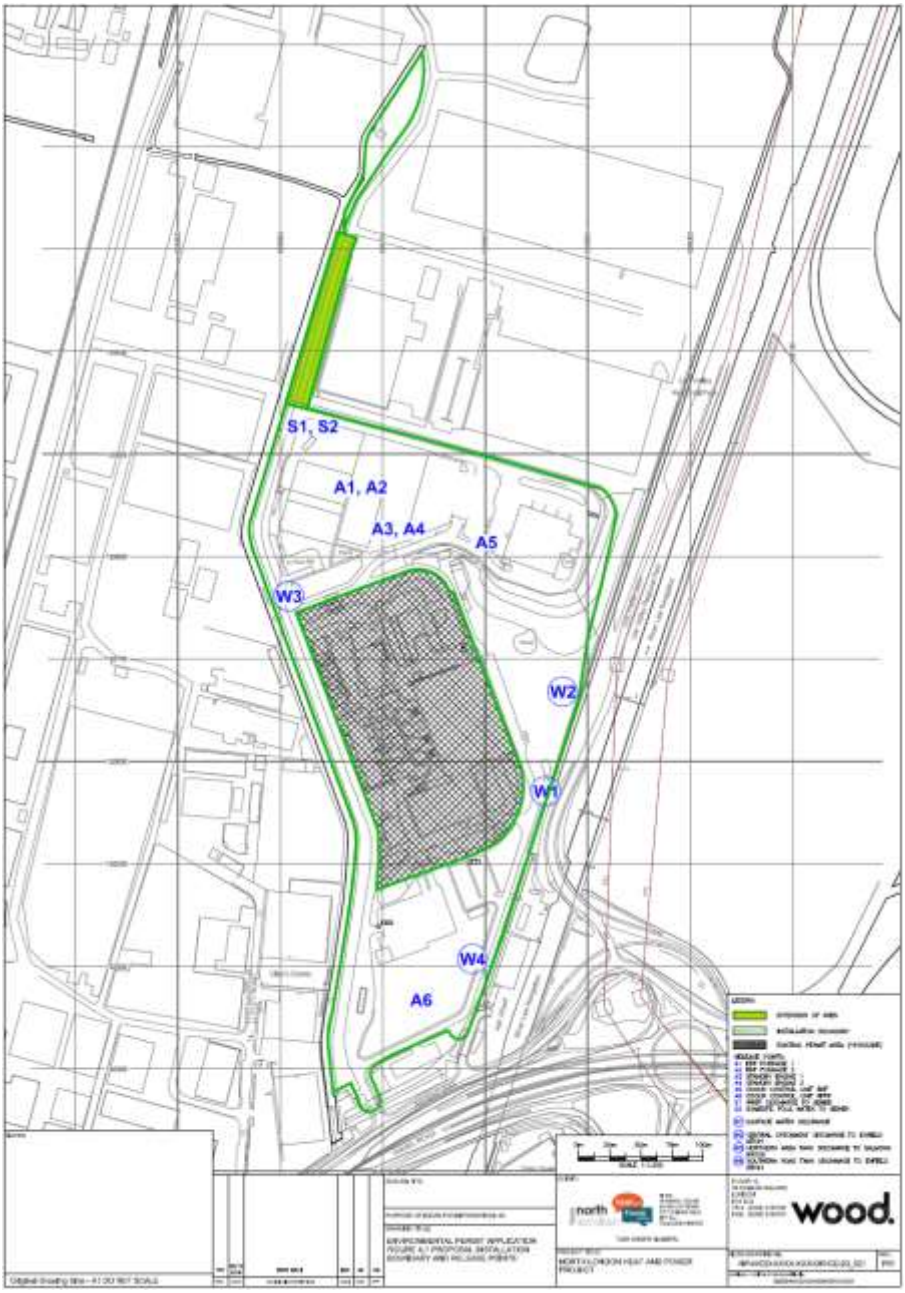
‘stabilisation’ means processes which change the hazardousness of the constituents in the waste and transform hazardous waste into non-hazardous waste

‘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

Drafting note: on the occasions where no site plan is required, all text should be deleted and replaced with the words “No site plan is required under this schedule.”



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