Contents

INTERPRETATION OF TERMS

For the purposes of this Permit, and unless the context requires otherwise, the following definitions shall apply:

Any term or expression already defined in the Regulations shall be taken to have the same meaning as provided in the Regulations;

"AMS" means Automated Measurement Systems

"Another Relevant Person" in relation to relevant convictions is as defined in Section 74(7) of the Environmental Protection Act 1990;

"Authorised Person" means a person who is authorised in writing under Section 108 of the

Environment Act 1995 to carry out duties on behalf of SEPA;

"Abnormal Operation" for the purposes of Schedule 5 of this Permit, means disturbances or failures of the flue gas cleaning systems or CEMS which results in any ELV specified in this Permit being exceeded.

"Breakdown" for the purposes of Schedule 5 of this Permit, means a stoppage, disturbance or failure of any piece of plant or equipment which forms part of the incineration plant which may cause a breach of any condition of this Permit.

"British Standard 4142: 2014" or "BS4142: 2014" means the BS 4142: 2014 on "Methods for rating and assessing industrial and commercial sound" or any revision of those guidelines as subsequently published by the British Standards Institute;

"CEMS" means Continuous Emission Monitoring System;

"Cessation of Commissioning" means the earliest to occur of either (a) the date of the completion of the final Commissioning test referred to in the commissioning plan required by condition 2.8.3, or (b) a date to be confirmed in writing by SEPA;

"Commencement of Commissioning" for the purposes of this Permit, means the earliest date on which the incinerator is first fired on non-waste or waste fuel at the Permitted Installation, this is known as "hot commissioning";

"Chapter IV of IED" means Chapter IV of the Industrial Emissions Directive;

"CHPQA" means the programme carried out on behalf of the Department of Energy and Climate Change which provides a methodology for assessing the quality of CHP schemes in terms of their energy efficiency and environmental performance. This methodology is based on Threshold Criteria which must be met or exceeded in order for the whole of the scheme to qualify as 'Good Quality' CHP. Further details can be found on the website www.chpqa.com;

"Climate Change Agreement" has the same meaning as in Section 46 of the Finance Act 2000;

"Co-incineration" and "Co-incineration plant" have the same meaning as in the Regulations;

"Commissioning" means the period between the Commencement of Commissioning and the Cessation of Commissioning;

"De-commissioning" means ceasing the use of the Permitted Installation, or part thereof, including decontaminating and dismantling the equipment to such an extent that it can no longer be used;

"Emission" has the same meaning as in the Regulations;

"European Waste Catalogue" ("EWC") means the list of wastes pursuant to Article 1(a) of Directive 75/442/EEC on waste and Article 1(4) of Directive 91/689/EEC on hazardous waste contained in Council Decision 2000/532/EC (OJ L 226, 6.9.2000, p.3) as amended by Council Decisions 2001/118/EC (OJ L 47 16.2.2001, p.32) and 2001/119/EC (OJ L 203, 28.7.2001, p.18)(or any subsequent amendments to the same);

"First Operation" means the first date of receipt of waste for incineration, after Cessation of Commissioning;

"First Year of Operation" means the first year of operation of the incineration plant commencing after First Operation, the date of which shall be specified in writing by SEPA;

"Hazardous Substance" means substances or mixtures as defined in Article 3 of Regulation (EC) No 1272/2008 of the European Parliament on classification, labelling and packaging of substances and mixtures;

"Heat and Power Plan" means the plan that contains as a minimum, the information specified in Annex 2 of SEPA's Thermal Treatment of Waste Guidelines;

"High level of efficiency" means that energy efficiency specified in SEPA's TTWG;

"Incident" means any of the following situations:

- where an accident occurs which has caused or may have the potential to cause pollution;
- where any malfunction, breakdown or failure of plant or techniques is detected which has caused or may have the potential to cause pollution;
- where any substance, vibration, heat or noise specified in any condition of this Permit is detected in an emission from a source not authorised by a condition of this Permit and in a quantity which may cause pollution;
- where an emission of any pollutant not authorised to be released under any condition of this Permit is detected; or,
- where an emission of any substance, vibration, heat or noise is detected that has exceeded, or is likely to exceed, or has caused, or is likely to cause to be exceeded any limit on emissions specified in a condition of this Permit;

"Incineration" and "Incineration Plant" have the same meaning as in the Regulations;

"Incinerator" means the furnace and combustion chamber in which waste incineration takes place as opposed to the "Waste Incineration Installation" which has wider coverage across the Permitted Installation.

"Industrial Emissions Directive" or "IED" means Directive 2010/75/EU on Industrial Emissions (Integrated Pollution Prevention and Control) (Recast);

"Location Plan" means the plan attached at Figure 2 in Schedule 1;

"Operator" means the person who has control over the operation of the installation;

"Operation" has the same meaning as in The Pollution Prevention and Control (Scotland) Regulations 2012, A Practical Guide (Part A Activities);

"OTNOC" or "Other Than Normal Operating Conditions" means those operations identified in Table 5.1 in Schedule 5 of this Permit;

"the Permitted Installation" is defined in Schedule 1 of this Permit and includes references to parts of the Permitted Installation;

"Pollutant" and "Pollution" have the same meaning as in the Regulations;

"Quality Index value" has the same meaning as defined and calculated in the "Thermal Treatment of Waste Guidelines or any revision of those guidelines as subsequently published on SEPA's website at www.sepa.org.uk;

"the Regulations" means The Pollution Prevention and Control (Scotland) Regulations 2012, SSI 2012 No. 360, as amended;

"Relevant Hazardous Substances" (RHS) are those hazardous substances that are capable of contaminating soil and groundwater based upon consideration of the chemical and physical properties of the substance.

"Residues" has the same meaning as in Article 43 of the Industrial Emissions Directive;

"SEPA" means the Scottish Environment Protection Agency;

"SEPA Odour Guidance" means the guidance entitled "SEPA Odour Guidance 2010" or any revision of that guidance as subsequently published on SEPA's website at www.sepa.org.uk;

"separately collected waste" has the same meaning as in the Regulations;

"the Site" is defined in Schedule 1 of this Permit and 'on-site' and 'off-site' shall be interpreted accordingly;

"the Site Boundary" means the boundary of the site as shown in green in the Site Plan;

"Site Plan" means the plan attached at Figure 1 in Schedule 1;

"specified waste management activity" means an activity comprising—

a) the disposal of waste in a landfill, whether or not the disposal falls within Section 5.2 of Part 1 of Schedule 1,

b) the disposal or recovery of waste falling within Sections 5.3, 5.4 or 5.6 of that Part of that Schedule, or

c) the disposal or recovery of waste in a Waste Incineration Installation.

“Start-up” means the restarting of the Permitted Installation or part thereof following any shutdown for any reason, it includes partial shutdowns, for example to repair equipment necessary to ensure compliance with the conditions in this Permit;

“Start-up period” means the period between igniting the burners until the temperature reaches that specified in Condition 5.1.1c).;

“Shut-down” means the cessation of the incineration of waste and can include the cooling of the incineration plant to ambient temperature;

“Shut-down period” means the period of time taken to shut down;

“Thermal Treatment of Waste Guidelines” or “TTWG” means the guidelines entitled “SEPA’s Thermal Treatment of Waste Guidelines 2014” or any revision of those guidelines as subsequently published on SEPA’s website at www.sepa.org.uk;

“Waste” has the same meaning as in the Regulations;

“Waste Incineration Installation” has the same meaning as in the Regulations;

“Waste Reception Area” means the building containing the tipping hall and the waste bunker;

"Waste oil" has the same meaning as in the Regulations;

“Water Environment” has the same meaning as in the Water Environment and Water Services (Scotland) Act 2003 that is all surface water, groundwater and wetlands; and

“surface water”, “groundwater” and “wetlands” shall have the same meanings as in the Act;

“Waste Incineration BAT Conclusions” or “Waste Incineration BATC” means the 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 (notified under document C (2019) 7987) published in the Official Journal of the European Union on 3 December 2019;

Any reference to a group of conditions, numbered condition, schedule, table, appendix, figure or paragraph is a reference to a group of conditions, numbered condition, schedule, table, appendix, figure or paragraph bearing that number in this Permit.

Except where specified otherwise in this Permit:

- “day” means any period of 24 consecutive hours;
- “week” means a period of 7 consecutive days;

- “month” means a calendar month;
- "quarter" means a calendar quarter;
- “year” means any period of 12 consecutive months;

and any derived words (e.g. “monthly”, “quarterly”) shall be interpreted accordingly.

Except where specified otherwise in this Permit, any reference to an enactment or statutory instrument includes a reference to it as amended (whether before or after the date of this Permit) and to any other enactment, which may, after the date of this Permit, directly or indirectly replace it, with or without amendment;

“APCr” means Air Pollution Control residue;

“BAT – AEL” means Best Available Technique – Associated Emission Level;

“ELV” means Emission Limit Value;

“FDBR” means Fachverband Dampfkessel, Behälter und Rohrleitungsbau, the German: Association of Steam Boiler, Tank and Pipeline Construction);

“IBA” means Incinerator Bottom Ash”;

“LOI” means Loss on Ignition;

“mAOD” means metres Above Ordnance Datum;

“mBGL” means metres Below Ground Level;

“NCV” means Net Calorific Value;

“MCP” means Medium Combustion Plant;

“NOX” means Oxides of Nitrogen (NO and NO2 expressed as NO2);

“PAH” means Polycyclic Aromatic Hydrocarbons;

“QAL” means Quality Assurance Level;

“SCR” means Selective Catalytic Reduction;

“SNCR” means Selective Non-Catalytic Reduction;

“TOC” means Total Organic Carbon

1 THE PERMITTED INSTALLATION

1.1 Description of Permitted Installation

1.1.1 The permitted installation to which this Permit applies ("the Permitted Installation") is:

a) the stationary technical unit specified in paragraph 1.1.4 ("the Stationary Technical Unit"), where the activities specified in paragraph 1.1.3 are carried out ("the Activity"), together with the directly associated activities specified in paragraph 1.1.5 ("the Directly Associated Activity");

b) the site ("the Site") of the Permitted Installation is delineated in green on the Site Plan (Figure 1);

1.1.2 The general location of the Site is as shown on the Location Plan (Figure 2).

1.1.3 The Activities carried out at the Stationary Technical Unit are:

a) the Incineration of waste which is described in Part A of Section 5.1 paragraph (b) of Schedule 1 to the Regulations as Incineration of non-hazardous waste with the exception of waste which is biomass or animal carcasses in an incineration or co-incineration plant.

1.1.4 The Stationary Technical Unit comprises the following units:

a) the DERC is made up of: a Waste Reception Area comprising a tipping hall with a single waste storage bunker with overhead grab cranes for mixing waste in the bunker and loading of the waste feed hopper, all within an enclosed building fitted with fast acting roller shutter doors;

b) a single line air-cooled grate incinerator and associated combustion chamber for the incineration of waste at temperatures above 850°C with a 2 second residence time. The single line is capable of burning up to 333,600 tonnes per annum of non-hazardous residual refuse derived fuel. However, the DERC will have a nominal design capacity of 300,000 tpa based on 8,000 hours operation and a throughput of 37.5 tonnes per hour of waste with a net calorific value (NCV) of 9.5 MJ/Kg. The combustion temperature is supported by auxiliary firing of gas-oil fired low NOx burner(s). Primary air feed is drawn from the Waste Reception Area and fed via the underside of the grate; secondary air feed is injected from nozzles in the furnace wall;

c) integral water tube heat recovery boilers to recover heat from combustion gases and generate superheated steam at high steam conditions, i.e. above 70 bar and 430oC;

d) a high-efficiency condensing steam turbine for the generation of electrical energy and allowing heat export. The electrical generator is capable of generating approximately 30.0 MWe and exporting approximately 27 MWe and up to 24.1 MWth of heat;

e) equipment for transfer, cooling, screening and storage of bottom ash, prior to transfer into trucks inside a fully enclosed building by bucket loader for transfer off-site.

f) An Air Pollution Control residues (APCr) silo from which a portion is recycled back into flue gas treatment and the remainder is discharged to tanker for offsite treatment or disposal;

g) boiler water treatment comprising chemical dosing;

h) flue gas cleaning and conditioning comprising Selective Non-Catalytic Reduction (SNCR) injection of ammonia solution into the combustion chamber to control NOx emissions; and a fabric bag filter for the removal of particulate matter and heavy metals; injection of powdered activated carbon (PAC) upstream of the fabric bag filter for abatement of dioxins/furans and other volatile organic compounds and heavy metals and injection of lime for abatement of acid gases including sulphur dioxide. The line discharges to atmosphere via an induced draft fan and an external stack. The top of the stack will be 90m above ground level (294m AOD);

i) storage and handling of raw materials including storage of powdered activated carbon (PAC) and hydrated lime in silo's fitted with overfill protection and ammonia solution and gas oil in external roofed bulk storage tanks with overfill protection;

j) continuous emission monitoring system for flue gas emissions from the main stack comprising a duty and standby CEMS with associated data management and recording system;

k) a fan for extraction of odorous air from the Waste Reception Area for periods when the incinerator is shut-down. This system removes particulate and discharges to air via a stack discharging 58m above ground level (8 m above the building height);

l) process effluent including boiler blow down, wastewater from cleaning and any process leachate is collected and used in the ash quench system. Excess effluent which cannot be recycled such as arisings from maintenance outages are sent off-site by tanker for treatment and / or disposal;

m) standby gas-oil fired electrical generation, with a thermal capacity of approximately 3.6MWth to provide electrical power to the plant to allow a safe shutdown in the event of loss of generation or the grid supply; and,

n) site utilities and services not described elsewhere in this Schedule including control systems for the operation of the permitted installation; the air-cooled condenser to condense exhaust steam from the turbine for recirculation in the boiler; and compressed air systems.

1.1.5 The following Directly Associated Activity is carried out on the Site:

a) a surface water collection and treatment system for uncontaminated surface water discharging to a Sustainable Urban Drainage System (SUDS) via Class 1 bypass petrol interceptors into an outfall in the Cameron Burn (NGR NS 78638 68524). Penstock valves with the facility for automatic remote operation to isolate the process and surface water discharges.

b) weighbridge systems;

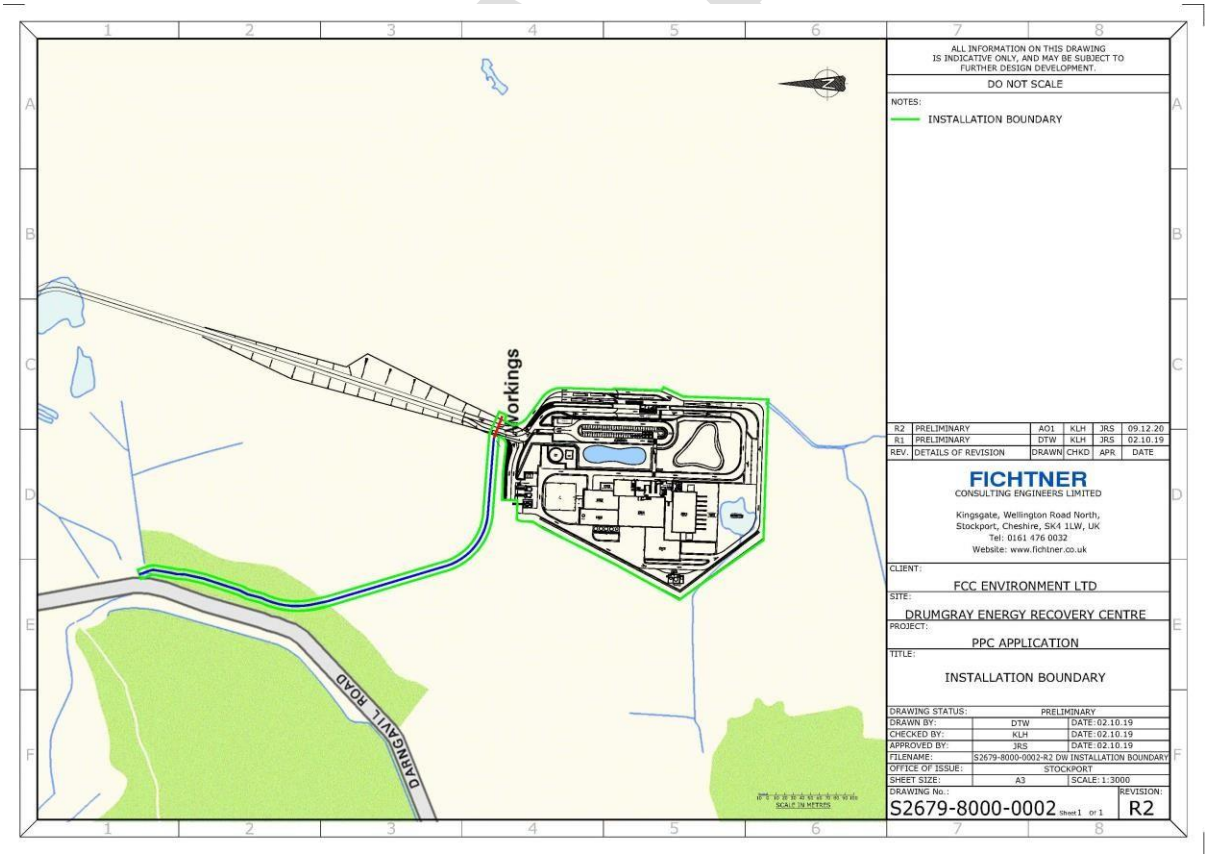
c) The export of electricity to the national grid and / or heat to other users.

d) delivery and dispatch of raw materials, wastes and residues to and from the Site via dedicated offloading areas. Tanker offloading of ammonia and gas oil is via a dedicated offloading area with drainage to a contained area which is segregated from the surface water drains; and

e) storage of supplementary raw materials.

1.1.6 For the purposes of this Permit, the Activity and Directly Associated Activity shall be known together as “the Permitted Activities”.

1.2 Figure 1 - Site Plan



1.3 Figure 2 - Site Location

2 GENERAL MANAGEMENT CONDITIONS

2.1 Administration

2.1.1 The Operator shall have an appropriate person (and deputy) as the primary point of contact with SEPA and shall notify SEPA in writing of the name of the appointed person (and deputy) within 4 weeks of the date of this Permit.

2.1.2 In the event of a different person being appointed to act as primary point of contact (or deputy), the Operator shall notify SEPA in writing of the name of the appointed person or deputy without delay.

2.1.3 A copy of this Permit shall be kept at the Permitted Installation and shall be made readily accessible for examination by all staff.

2.1.4 Any systems or procedures used by the Operator to demonstrate compliance with a condition of this Permit shall be recorded.

2.2 Records

2.2.1 All records made in compliance with this Permit shall be kept in a systematic manner.

2.2.2 Unless otherwise specified in a condition of this Permit, every record made in compliance with a condition of this Permit shall be preserved for not less than 5 years from the date of its being made. Every such record shall be kept at the Permitted Installation for not less than one year from the date of it's being made, and thereafter preserved at a location previously notified to SEPA in writing, if that location is not the Permitted Installation.

2.2.3 All records shall be legible, and any amendment made to any record made in compliance with a condition of this Permit shall be made in such a way as to leave the original entry clear and legible. The reason for each amendment shall be explained in the said record.

2.2.4 Without prejudice to Condition 2.2.2, all Operators' records relevant to the operation and maintenance of the Permitted Installation shall be kept at the Permitted Installation for not less than one year from the end of the period to which they apply.

2.2.5 Where any condition of this Permit requires information to be recorded a record shall be maintained and, where appropriate, reviewed by the date(s) specified in Table 2.1.

2.2.6 Without prejudice to Condition 2.2.2, any data required by any condition of this permit shall be stored in a permanent and secure way.

2.3 Reporting

2.3.1 Where any condition of this Permit requires information to be reported, a report shall be forwarded to SEPA by the date(s) or within the period or at the frequency specified in Table 2.1, and, where appropriate, the first report shall be due on the date specified in that Table. All such reports shall include the Permit number, Permit Condition number and the name of the Operator.

2.3.2 The reports referred to in Condition 2.3.1 shall be forwarded to SEPA to the email or postal address specified by SEPA in the explanatory notes attached to this Permit.

2.3.3 Where the Permitted Installation has not operated for the duration of any relevant reporting period specified in Table 2.1, the Operator shall provide written notification to SEPA. This shall confirm that no relevant reports have been made in terms of Condition 2.3.1, because the Permitted Installation has not operated during the said period. Such notifications shall be submitted within one month of the end of the reporting period concerned.

2.3.4 All notifications required by any condition of this Permit shall be made to SEPA in the manner specified in that condition to the email or postal address specified in the explanatory notes attached to this Permit by the date/ period specified in Table 2.1. All such notifications shall include the Permit number, Permit Condition number and the name of the Operator.

2.4 Data Reporting

2.4.1 The Operator shall complete a quarterly waste data report, the "Licensed/Permitted Site Returns Form" located on SEPA's website at www.sepa.org.uk. This form shall be completed and submitted to the address specified by SEPA within 28 days of the last day of March, June, September and December each year.

2.4.2 The Operator shall provide an annual summary report to SEPA containing the results of monitoring carried out in compliance with Conditions 6.3.9, 6.4.4, 7.3.3, 7.4.4, 8.1.5 and 8.1.6; notifications reported under Condition 2.5.4, 5.4.2 and 6.2.10; and an account of the functioning and running of the incineration plant including records under Condition 5.2.5 and Condition 7.1.9. This report shall give an explanation and interpretation of any trends or exceedances in the information submitted and an account of hours of Abnormal Operation under Condition 5.4.4 and hours of Other Than Normal Operating Conditions (OTNOC) under Condition 5.4.8 relative to total hours of operation on waste.

2.5 Incidents

2.5.1 In the event of an Incident, all necessary measures shall immediately be taken:

a) to prevent, or where that is not practicable, to reduce emissions from the Permitted Installation:

b) to limit the environmental consequences as a result of that Incident: and

c) to prevent further possible Incidents.

2.5.2 Without prejudice to the requirements of condition 2.5.1, in the event of a breach of any condition of this Permit the operator shall immediately take the measures necessary to ensure that compliance is restored in the shortest possible time.

2.5.3 Notwithstanding the requirements of Condition 2.5.1 and 2.5.2 where a breach of any condition of this Permit poses an immediate danger to human health, or threatens to cause an immediate significant adverse effect on the environment, the operator shall suspend operation of the Permitted Installation or relevant part thereof until such time as it can be operated in compliance with this Permit.

2.5.4 In the event of an Incident and/or a breach of any condition of this Permit, the Operator shall notify SEPA by telephone without delay to 0800 80 70 60. A notification that relates to an incident shall include, as far as practicable, the information specified in Condition 2.5.5.

2.5.5 The Operator shall confirm any Incident to SEPA in writing to the address specified by SEPA by the next working day after identification of the Incident. This confirmation shall include: the time and duration of the Incident; the receiving environmental medium or media where there has been any emission as a result of the Incident; an initial estimate of the quantity and composition of any emission; the measures taken to prevent or minimise any emission or further emission; and, a preliminary assessment of the cause of the Incident.

2.5.6 Any Incident notified to SEPA shall be investigated by the Operator, and a report of the investigation sent to SEPA. The report shall detail, as a minimum: the circumstances of the Incident; an assessment of any harm to the environment; and, the steps taken by the Operator to bring the Incident to an end. The report shall also set out proposals for remediation, where necessary, and for preventing a repetition of the Incident.

2.5.7 By 3 months prior to Commissioning of the Installation or part thereof, the Operator shall prepare, implement and maintain an "Incident Prevention and Mitigation Plan". This plan shall set out the steps to be taken by the Operator to ensure that all preventative measures are in place to avoid an Incident to any medium, and that any Incident that does occur is mitigated in the most appropriate manner.

2.5.8 At least every 2 years the Operator shall review the Incident Prevention and Mitigation Plan required under Condition 2.5.7. Each review of the Incident Prevention and Mitigation Plan shall be recorded and where the Operator makes any revisions to the said plan said revisions shall be recorded.

2.6 Resource Utilisation

2.6.1 Over the 4 year period (specified in Table 2.1), the Operator shall carry out a systematic assessment to determine:

a) how and where raw materials (including water and fuel) and energy are used within the Permitted Installation;

b) the quantities of raw materials (including water and fuel) and energy that are used within the Permitted Installation;

c) how and where emissions and wastes are generated within the Permitted Installation;

d) the quantities of emissions and wastes generated within the Permitted Installation;

e) how and where raw materials (including water) and energy can be utilised more efficiently within the Permitted Installation to minimise emissions and waste; and

f) which identified opportunities/projects, within a specified timeframe, will be implemented at the Permitted Installation.

2.6.2 The objective of this systematic assessment is to identify and implement any opportunities and / or projects, on an on-going basis, to:-

a) increase the efficiency of raw materials (including water and fuel) and energy;

b) prevent, or where that is not practicable, minimise emissions and wastes generated through the inefficient operation of the Permitted Installation or associated processes; and

c) reuse by-products (including heat and power) generated, where applicable, either from the Permitted Installation or from other activities.

When submitting the findings of the assessment, a summary of the progress of each of the opportunities / projects identified from the systematic assessment must be included. SEPA reserve the right to periodically review progress of these opportunities and projects during inspections of the Permitted Installation undertaken throughout the 4 year assessment period.

The assessment shall be recorded using the "systematic assessment of resource use and efficiency template", (available at www.sepa.org.uk) or equivalent format as agreed by SEPA, and reported to SEPA at the end of the 4 year assessment cycle (as specified in Table 2.1).

2.6.3 Annual totals of raw materials (including water and fuel consumed) energy utilised, emissions and waste produced within the Permitted Installation, shall be recorded by the Operator annually in the relevant section of the "systematic assessment of resource utilisation" template. The Operator shall report that data to SEPA within 28 days of the end of the 4 year assessment cycle.

2.6.4 For the purposes of Conditions 2.6.1 and 2.6.2, "raw materials, energy and fuel" shall mean the materials listed in Table 2.2.

2.7 Heat and Power Conditions

2.7.1 The Operator shall, no later than the Cessation of Commissioning, operate the Permitted Installation in such a manner as to ensure that the recovery of energy takes place with a high level of energy efficiency which meets start-up energy efficiency benchmarks in SEPA's Thermal Treatment of Waste Guidelines (TTWG).

2.7.2 The Operator shall maintain a Heat and Power Plan. Following Cessation of Commissioning the Heat and Power Plan will be reviewed and updated annually, with a report submitted to SEPA no later than 31 January of each year.

2.7.3 The reviewed and updated Heat and Power Plan shall contain as a minimum the information as specified in Annex 2 of the TTWG and shall:

a) demonstrate how the plant is moving towards good quality combined heat and power status;

b) demonstrate how the plant is working towards complying with the criteria for achieving certification under the CHPQA standard; and

c) include calculations to report the CHPQA Quality Index value and indicative efficiency for the reporting year and an assessment of that performance.

2.7.4 Within 7 years from the date of First Operation of the Permitted Installation, the total quantity of energy recovered in the form of electrical or heat energy or a mix of electrical and heat energy shall exceed the amount of energy equivalent to a Quality Index value of 93 or an indicative efficiency of 35% calculated in accordance with the TTWG.

2.7.5 In the event that the operator considers that compliance with condition 2.7.4 is not likely, due to circumstances out with its control, the operator shall submit to SEPA in writing the details of those circumstances and the reasons for the likely noncompliance, with reference to the provisions of the Thermal Treatment of Waste Guidelines and the most recently agreed Heat & Power Plan. Such notification shall be provided to SEPA at least 3 months prior to the deadline for compliance with condition 2.7.4, together with information on the Operators proposals on how and when the requirements of condition 2.7.4 will be met.

2.7.6 Where the operator complies with condition 2.7.5, the requirements of condition 2.7.4 will be dis-applied until such time as the operator has received written confirmation from SEPA (which refers to the provisions of the Thermal Treatment of Waste Guidelines and the most recently agreed Heat & Power Plan) that either (a) the requirements of condition 2.7.4 continue to apply, or (b) condition 2.7.4 is varied by issue of a variation notice by SEPA under regulation 46."

2.8 Prior Commissioning Conditions

2.8.1 The Operator shall not proceed with the Commencement of Commissioning until:

a) Conditions 2.8.2 to 2.8.36 inclusive have been complied with; and,

b) The Operator has received confirmation from SEPA in writing that those conditions have been complied with.

2.8.2 By 31 October 2021, the Operator shall provide SEPA with a plan of the implementation programme from Construction through to Commissioning (the "Construction and Commissioning Plan") of the ERC. Said plan should include the best estimates of the start date and duration for each major stage of construction and commissioning, and the key steps involved. An update of progress against the Construction and Commissioning Plan shall be provided to SEPA on a quarterly basis.

2.8.3 Without prejudice to Condition 2.8.2, at least 3 months, or such period as otherwise agreed in writing with SEPA, prior to the Commencement of Commissioning, the Operator shall notify SEPA in writing of a detailed Commissioning Plan to include the following:

a) details of the work to be carried out including each test required by Condition 2.9.2.

b) the proposed dates on which the said work or test in Condition 2.8.3 a) will be started and completed; and

c) the criteria for determining when the Commissioning has ceased.

2.8.4 No later than 6 months prior to the Commencement of Commissioning, the Operator shall provide SEPA with a report containing the details of proposals for any temporary Emission Limit Values (ELVs) for emissions to air to apply during Commissioning ("Commissioning ELVs"). The report shall include the following information:

a) for each separate stage of commissioning where a Commissioning ELV is proposed:

(i) identification of the specific stage of Commissioning and an explanation of what this involves;

(ii) the proposed ELV. This should include a lower ELV requiring action, and a higher ELV requiring a notification to SEPA and incinerator shut-down, and a justification and air quality impact assessment for those ELVs.

b) proposals for notification of non-compliance with any of the Commissioning ELVs; and,

c) how compliance with the ELVs in Table 6.2, 6.2a and 6.2b in Schedule 6 of the Permit will be achieved in the shortest possible time.

2.8.5 Notwithstanding Condition 2.7.2, no later than 6 months prior to the Commencement of Commissioning, the Operator shall submit an updated version of the Heat and Power Plan provided in the application applied for under the Regulations. The updated heat and power plan shall:

a) set out the steps to be taken to recover and use energy from the Permitted Installation with a high level of energy efficiency;

b) as a minimum contain the information specified in Annex 2 of the TTWG;

c) confirm the proposed outlets agreed in principle with third parties for heat and power;

d) confirm the proposed timescales for implementation of Condition 2.8.5 (c);

e) provide updated evidence in writing to SEPA, including the quantity and date of commencement of supply, that permission has been granted from the relevant competent authority, company or companies to export electricity and/or heat to local users.

f) confirm the timetable in the Construction and Commissioning Plan of the timetable to ensure that the infrastructure required for either, or both, of the following will be installed and available prior to First Operation of the Permitted Installation in order to meet the start-up threshold requirements as specified in the TTWG:

(i) exporting electricity to the National Grid and/ or to local users of the Permitted Installation; and/ or,

(ii) heat supply infrastructure together with heat uptake contracts.

2.8.6 No later than 3 months prior to the Commencement of Commissioning, the Operator shall confirm to SEPA in writing, that infrastructure for exporting electricity and/ or heat or steam to the National Grid and/ or to local users has been completed and that on First Operation of the Permitted Installation said electricity shall be exported in order to meet the start up threshold requirements as specified in the TTWG.

2.8.7 At least 12 months prior to the Commencement of Commissioning, the Operator shall submit a written report to SEPA on the details of the computational fluid dynamic (CFD) modelling. The report shall demonstrate the following:

a) that the design combustion conditions comply with the minimum temperature and residence time requirements as defined in Condition 5.1.1 (c) and Condition 5.1.1 (d) respectively whilst operating under normal load and under the most unfavourable operating conditions. Unfavourable operating conditions should be justified and should include minimum turn down and overload conditions;

b) the optimum positional requirements for the location of the secondary air injection system and any injection of tertiary air or inlet from flue gas recirculation;

c) the minimum oxygen level required to ensure adequate combustion under the different load conditions referred to in Condition 2.8.7 a);

d) the optimum positional requirements for the locations of the temperature and oxygen monitoring of flue gases exiting the combustion chamber;

e) the optimum positional requirements for the locations of the ammonia SNCR injection system under the different load conditions referred to in Condition 2.8.7 a); and

f) that the design includes sufficient monitoring ports to support subsequent validation of these requirements during Commissioning.

2.8.8 No later than 6 months prior to the Commencement of Commissioning, the Operator shall submit to SEPA a report outlining the proposed methodology to verify compliance with Condition 5.1.1 (b), (c) and (d) on Commissioning. Said methodology shall make reference to the requirements set out in Environment Agency R&D Technical Report P4-100/TR Part 2 (Validation of Combustion Conditions) November 2001, include justification for alternative techniques, and explain how the validity of the model required by Condition 2.8.7 will be demonstrated.

2.8.9 No later than 3 months prior to the Commencement of Commissioning, the Operator shall provide a report on the Environmental Management System (EMS) designed to meet the requirements of BAT 1 of the Waste Incineration BATC. The report shall detail how each feature of BAT 1 as described in paragraphs (i) to (xxviii) (excluding xxii and xxvi) of BAT 1 is met.

2.8.10 No later than 3 months prior to the Commencement of Commissioning, the Operator shall submit to SEPA a report outlining the proposed methodology to be used during Commissioning to confirm the gross electrical efficiency of the incineration plant at full load. The proposed methodology should be based on the guidance provided in the Fachverband Dampfkessel, Behälter und Rohrleitungsbau (the German: Association of Steam Boiler, Tank and Pipeline Construction, or FDBR) Guideline RL 7 'Acceptance Testing of Waste Incineration Plants with Grate Firing Systems' 2013 or an equivalent British Standard e.g. BS EN 12952-15 Water-tube boilers and auxiliary installations: Acceptance tests.

2.8.11 Without prejudice to Condition 2.8.12 and 2.8.13, at least 6 months prior to the Commencement of Commissioning, the Operator shall submit a written report to SEPA specifying arrangements for continuous and periodic monitoring of emissions to air to comply with all relevant standards/ guidance, including but not limited to: BS EN 15267-3; BS EN 15259; BS EN 14181; BS EN 13284; DD CEN 15675; Environment Agency Technical Guidance Notes M1 and M2, and the requirements of BAT 3 and BAT 4 of the Waste Incineration BATCs. The report shall include the following:

a) plant and equipment details including relevant accreditation;

b) methods and standards for sampling and analysis of all substances and parameters identified in Table 6.2, 6.2a and 6.2b and Table 6.3 in Schedule 6 of the Permit, and Table 10.2 in Schedule 10;

c) detailed diagrams of monitoring locations and access for each emission point in order to satisfy the requirements of BS EN 15259; and,

d) an explanation of the proposed methodology to demonstrate when full burn out of waste on the grate is achieved when shutting down the incinerator to ambient temperature, as required by Condition 2.9.2 (j).

2.8.12 No later than 6 months prior to the Commencement of Commissioning, the Operator shall submit a report to SEPA to confirm the proposals for monitoring of mercury as required by Condition 6.5.1.

2.8.13 No later than 6 months prior to the Commencement of Commissioning, the Operator shall submit a report to SEPA to confirm the proposals for sampling of dioxins and furans and dioxin-like PCBs as required by Condition 6.5.2.

2.8.14 No later than 6 months prior to the Commencement of Commissioning, the Operator shall submit a report to SEPA to confirm the proposals for monitoring of emissions to air during the Other Than Normal Operating Conditions (OTNOC) identified under Condition 2.8.16 to meet the requirements of BAT 5 in the Waste Incineration BATC.

2.8.15 No later than 3 months prior to the Commencement of Commissioning, the Operator shall submit a report to SEPA to confirm the techniques to be followed to limit the frequency of shut-down and start-up operations as far as practicable as required by BAT 16 in the Waste Incineration BATCs. The report should identify how the supply chain and spares policy is organised to limit start up and shut-down and make reference to techniques in both the Start-Up and Shut-down Plan required by Condition 2.10.1, and the OTNOC Management Plan required by Condition 2.8.16 and agreed in writing with SEPA. A copy of the relevant operational procedures to limit start up and shutdown should also be provided.

2.8.16 No later than 3 months prior to the Commencement of Commissioning, the operator shall submit a copy of the risk-based OTNOC Management Plan (the "OTNOC Management Plan") as required by BAT 18 in the Waste Incineration BATCs. Said plan shall include the following: a list of scenarios considered to represent OTNOC for the Permitted Installation; the proposed techniques to reduce the frequency of the occurrence of OTNOC; and, the proposed techniques to reduce associated emissions to air and water during each of the OTNOC scenarios identified. The plan shall form part of the EMS for the Permitted Installation and shall include all of the 5 elements required by BAT 18 in the Waste Incineration BATC. The OTNOC Management Plan shall be agreed in writing with SEPA.

2.8.17 At least 12 months prior to the Commencement of Commissioning, the Operator shall submit a report to SEPA confirming the techniques to be used for the control of emissions of noise and vibration from the Permitted Installation during normal, abnormal and emergency conditions. The report shall explain how BAT has been applied to prevent or reduce noise from individual noise sources and should include, but not be limited to, consideration of the following:

a) Procedures and operational controls for management of start-up noise including scheduling of start-ups with reference to the requirements of Condition 3.1.4a);

b) Techniques for abatement of noise from all vents including emergency relief valves and start up vents such as high-pressure silencers to mitigate noise to a maximum decibel level. This must include the hogger and turbine bypass;

c) Noise abatement techniques for externally located equipment, e.g. the aircooled condensers and flue gas treatment plant fans;

d) Techniques to prevent noise from vehicle reversing alarms e.g. use of one way drive through systems inside and outside Incinerator building, alternatives to tonal intermittent bleeping. These should be compliant with SEPA's guidance at https://www.sepa.org.uk/regulations/pollution-prevention-and-control/guidance/

e) Siting of noise sources e.g. air-cooled condensers, pressure relief valves and reception hall entrance away from Noise Sensitive Receptors;

f) The level of noise insulation to be provided by the fabric of the main buildings including at ingress/egress points and any standards to be met;

g) Specific design details to prevent noise emissions including, but not limited to, tonal noise from noisy items of equipment including compressors, the standby

generator, the steam turbine generator and transformers and buildings housing that equipment;

h) Basic good practice measures including noise insulation and maintenance of any parts of plant or equipment whose deterioration may give rise to increases in noise;

i) Any other noise control techniques necessary to ensure that the noise from the installation is consistent with BAT 37 of the Waste Incineration BATC.

2.8.18 At least 12 months prior to the Commencement of Commissioning, the Operator shall submit a report to SEPA specifying the final design of the proposed system for the control of odour emissions during periods of planned and unplanned shutdowns of the incineration line in order to achieve ground level odour below 1.5 OUE/m^3 as the 98th percentile of hourly averages outside the boundary of the Permitted Installation. Said report shall confirm the following:

a) the details of any assumptions used in calculations;

b) the monitoring and maintenance regime to be applied to ensure that emissions of odour achieve a ground level concentration of odour below 1.5 OUE/m^3 as the 98th percentile of hourly averages beyond the Permitted Installation boundary and,

c) The type of abatement which will be required to achieve the requirements of Condition 2.8.18 b) and associated design details of said abatement system.

2.8.19 No later than 3 months prior to Commencement of Commissioning, the Operator shall provide the following design details of the standby generator:

a) rated thermal input (MW) of the standby generator;

b) type of standby generator (gas engine, gas-oil engine, dual fuel engine, other engines);

c) type and share of fuels according to the fuel categories laid down in Annex II of the Medium Combustion Plant Directive (EU) 2015/2193;

d) sector of activity of the standby generator or the facility in which it is applied (NACE code);

e) expected number of annual operating hours and average load in use;

f) where the option of exemption under Article 6(8) of the Medium Combustion Plant Directive (EU) 2015/2193 is used, a declaration signed by the operator that the standby generator will not be operated more than the number of hours referred to in that paragraph; and,

g) stack height, height above roof level (m), internal stack diameter (m) and Grid Reference (NGR) for stack.

h) a stack height assessment and an air quality impact assessment for the proposed stack height to include a habitats assessment.

2.8.20 No later than 3 months prior to the Commencement of Commissioning the operator shall report the results of the first set of results of environmental monitoring as required by Condition 9.1.2.

2.8.21 No later than 12 months prior to the Commencement of Commissioning, the Operator shall provide SEPA with a report to confirm the details of the design for the permanent SUDS Scheme for the management of surface water. Said scheme shall be designed such that all surface water, except for surface water arising from high risk areas, shall be subject to two levels of treatment by the SUDS. Surface water arising from high risk areas such as the Waste reception area, bottom ash handling and storage or fuel and chemical storage areas shall not connect into any surface water drains.

2.8.22 No later than 6 months prior to the Commencement of Commissioning, the Operator shall submit to SEPA a copy of the plan or plans that identify the configuration, specification and the position of all drains, subsurface pipework, subsurface sumps and storage vessels within the Permitted installation as required by Condition 7.5.6.

2.8.23 No later than 6 months prior to the Commencement of Commissioning, the Operator shall submit a report to SEPA confirming how contaminated water from fire-fighting will be managed following completion of final design. The report shall include but not be limited to the following:

a) confirmation of final design details and containment capacity of the internal and external arrangements for the storage of contaminated water from fire-fighting;

b) plans to show the internal and external location of all facilities for fire water containment and associated drainage systems across the permitted installation;

c) calculations to confirm the storage capacity referred to in Condition 2.8.23 a) is adequate to ensure that there will be no emissions to the Water Environment by any means, including over-topping or seepage through the containment walls as required by Condition 7.5.1 d). The calculations should identify any assumptions made and take into account, but not be limited to: fire-fighting arrangements on site, number of appliances likely to attend a fire, duration (including time for subsequent sampling prior to disposal) and predicted concurrent rainfall from storm events to provide a conservative estimate of the volume which may require to be contained; and,

d) copies of procedure(s) for routine management of containment facilities to ensure adequate capacity is always available in event of a fire.

e) copies of the safety data sheets for any fire-fighting foaming agents to be used.

2.8.24 At least 6 months prior to the Commencement of Commissioning, the Operator shall provide SEPA with a report confirming the proposed design and containment provisions for all bulk storages and storage areas including for solid raw materials and residues and the bulk storage of ammonia, gas oil and the associated offloading/loading areas. The purpose of said report shall be to describe how the design of the offloading areas, storages and associated bunding etc. will prevent emissions to the water environment, for example, due to tank overfill, other leak or spillage during routine storage or offloading/ loading activities and ensure compliance with Condition 7.1.2.

2.8.25 No later than 6 months prior to the Commencement of Commissioning, the Operator shall submit in writing to SEPA a drawing and cross-section of the decantation tank and associated pipework that will contain any wastewaters from the Permitted Installation, along with technical details of its capacity, secondary containment, leak detection, construction specification and material and method of operation.

2.8.26 At least 6 months prior to the Commencement of Commissioning, the Operator shall submit a written report to SEPA specifying the proposed monitoring techniques for Emission Points W1 and W2 in Table 7.1 in Schedule 7 to comply with the requirements of Table 7.2 and all relevant guidance, including Environment Agency Technical Guidance Notes M18 Monitoring discharges to Water and Sewer. The report shall include the following:

a) plant and equipment details including accreditation;

b) methods and standards for sampling and analysis of the substances identified in Table 7.1 and Table 7.2 of Schedule 7. For process effluent identified in Condition 7.1.9, this shall include proposals for a suitable analysis suite to fully characterise those pollutants which are likely to be present and to enable a WM3 analysis to be carried out as described in the document 'Guidance for the

c) Assessment and Classification of Waste, Technical Guidance WM3, UK Environment Agencies, 1st edition v1.1, as amended;

d) details and justification of proposed sampling regime to obtain representative samples; and,

e) details of monitoring location including grid reference and access.

2.8.27 At least 3 months prior to the first delivery of waste for use during Commissioning, the Operator shall submit to SEPA the waste acceptance procedures and associated inspection schedule to be applied at the Permitted Installation to ensure compliance with the conditions in Schedule 4 of the Permit. Said procedures and inspection schedule shall be agreed in writing with SEPA.

2.8.28 Without prejudice to Condition 8.1.1, no later than 3 months prior to the Commencement of Commissioning, the Operator shall submit to SEPA for approval a procedure for the accelerated start up sampling and testing of Incinerator Bottom Ash for the purposes of assessing the hazard status and, the Waste Acceptance Criteria (WAC), if goes to landfill, and for reporting of the results of said sampling and testing and the outcome of the hazard status and WAC tests. The procedure shall make reference to the following documents:

a) Guidance for the Assessment and Classification of Waste, Technical Guidance WM3, UK Environment Agencies, 1st edition v1.1, as amended; and,

b) A Sampling and Testing Protocol to Assess the Status of Incinerator Bottom Ash, Document reference WRc Report Reference UC 9390.05, published by the Environmental Services Association, January 2018, as amended.

2.8.29 No later than 6 months prior to the Commencement of Commissioning, the Operator shall submit details of the equipment and plant selected. This shall include a drawing and technical description of:

a) the waste infeed system to the incinerator;

b) the incinerator grate and first and second pass showing the location of all air supply systems; support burners; instrumentation and ammonia injection;

c) the bottom ash transport, cooling and storage system and associated collection;

d) the heat recovery and steam turbine energy generation systems including provisions for take-off of heat energy and waste heat removal and associated cooling systems; and,

e) the flue gas cleaning system with an explanation for the choice and location of dosing points; optimum injection rate and temperature ranges; the filtration system; transport and storage system.

2.8.30 No later than 3 months prior to Commencement of Commissioning, the Operator shall provide the Grid Reference (NGR) Locations of:

a) W1 – SUDS Discharge point; and,

b) W2 – Wastewater pit.

2.8.31 Steam Blowing activities (during Commissioning)

a) At least 3 months prior to the commencement of steam blowing activities during commissioning of the boiler, the operator shall submit a report to SEPA on the proposed design and operation of the steam blowing equipment including any silencers and associated pipework ("The Steam Blowing Equipment"). The report shall include: a description of the proposed equipment including the dimensions, the specification of any steam silencers in terms of predicted noise reduction and noise emissions, an Engineering Line Diagram to illustrate the

proposed design and details of the expected duration of each steam blowing event.

b) Steam blowing is permitted to be carried out between 09:00 and 17:00 hours Monday to Friday only (with the exception of Scottish Public Holidays).

c) The duration of any single steam blowing event shall, as far as reasonably practicable, be minimised to the shortest possible time.

d) No alteration of The Steam Blowing Equipment described in Condition 2.8.31 (a) is permitted unless agreed in writing with SEPA in advance of said alteration being carried out.

2.8.32 No later than 9 months prior to the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation, the Operator shall submit to SEPA the Soil and Groundwater Monitoring Plan required by Condition 7.6.7, for agreement. Said plan shall include the following:

a) A drawing of the Permitted Installation showing the exploratory locations (trial pits and boreholes) and justification for location selection, a timeframe for undertaking and completion of the exploratory works, details of proposed depths for trial pits and boreholes with justification for depth proposals relevance, trial pit and borehole exploratory logs presenting information in metres Above Ordnance Datum (mAOD) and metres below ground level (mBGL), details of the selection for soil sampling depth and relevance for chemical testing.

b) A drawing of the Permitted Installation showing the borehole locations and justification for location selection, a timeframe for undertaking and completion of the exploratory works, details of proposed depths for boreholes with justification for depth proposals, boreholes exploratory logs presenting information in mAOD and mBGL, details of the selection for groundwater sampling depth and relevance for chemical testing.

2.8.33 No later than 6 months prior to the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation, and following SEPA's agreement of the Soil and Groundwater Monitoring Plan locations referred to in Condition 2.8.32, the groundwater monitoring boreholes and trial pits referred to in Condition 2.8.32 shall be commissioned as agreed. In addition to the soil samples from trial pits referred to in Condition 2.8.32, soil samples shall also be collected from all of the said boreholes during their construction, for subsequent analysis, as required by Condition 2.8.32.

2.8.34 Within 1 month of completion of the boreholes and trial pits required by Conditions 2.8.32 and 2.8.33, a report shall be submitted to SEPA with details of their construction. Said report shall include all borehole and trial pit construction logs and the depth of all soil samples and groundwater encountered during their installation. All depths are to be recorded in mAOD and mBGL.

2.8.35 No later than 2 months prior to the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation, the first assessment of the Relevant Hazardous Substances (RHS) in the groundwater, as required by Condition 7.6.5, and in the soil, as required by Condition 7.6.6, shall be submitted to SEPA and will be considered as Baseline.

2.8.36 Prior to the Commencement of Commissioning, the design features necessary to ensure compliance with any condition of this Permit shall be checked to ensure they have been completed and installed as per design and signed off by a relevant qualified engineer. The scope and outcome of said checks shall be reported to SEPA, but as a minimum shall include documentary evidence to confirm the following:

a) that techniques for the control of noise emissions have been installed as described in Section 2.4.6 and Appendix C of the PPC Application and as described in the reports provided under Condition 2.8.17 and Condition 2.8.31;

b) that techniques for the control of odour emissions have been installed as described in the PPC Application, and as described in the report provided under Condition 2.8.18 to provide compliance with Condition 3.2.1 and the Odour ELVs prescribed in Table 6.2 and Table 6.2b in Schedule 6 of the Permit;

c) that the flue gas treatment systems and ancillary equipment techniques have been installed as proposed in response to Condition 2.8.29 e);

d) that techniques for the control of emissions to the Water Environment as described in the reports provided under Condition 2.8.21 to 2.8.26 inclusive and required by Conditions 7.1.2, 7.5.1, 7.5.8, 7.5.9 and 7.6.1 have been installed as described in response to those Conditions; and,

e) that the Permitted Installation has met the appropriate construction standards to be able to accept the first delivery of waste for use in Commissioning;

f) that structures such as the waste bunker, storage tanks, bunds, drains, sumps and areas of hard-standing etc, shall meet the requirements of relevant design and construction standards required to meet BAT for the prevention of fugitive emissions to soil and groundwater, based on evidence from construction quality assurance checks. These standards include, but are not limited to relevant Pollution Prevention Guidelines e.g. PPG 2 and PPG 18; British Standards such as BS EN 1992-3, and Construction Industry Research and Information Association (CIRIA) standards such as C736 etc. as referred to in the original application and in subsequent submissions to SEPA including the reports required under Condition 2.8.22 to 2.8.26 inclusive.

2.9 Commissioning Conditions

2.9.1 The Operator shall not carry out any Permitted Activities, or any new or substantially changed activities following on from a significant modification or change to the Permitted Installation, except as part of Commissioning notified to SEPA in compliance with Condition 2.8.3 until:

a) Conditions 2.9.2 to 2.9.6 inclusive have been complied with; and

b) the Operator has received confirmation from SEPA in writing that those conditions have been complied with.

2.9.2 When carrying out any Commissioning the Operator shall carry out tests to:

a) demonstrate that the Permitted Installation can be operated in compliance with the conditions of this Permit;

b) demonstrate that the furnace residence time, secondary combustion zone temperature and minimum oxygen content are consistent with the requirements of Condition 5.1.1(b), (c) and (d) under the most unfavourable operating conditions anticipated in accordance with the methodology submitted under Condition 2.8.8 and the CFD model submitted under Condition 2.8.7;

c) demonstrate the operation of the controls and interlocks installed to ensure compliance with condition 5.3.1 to 5.3.3;

d) demonstrate that the quality of the ash residues comply with the requirements of Table 8.1 and Condition 5.1.1(a) and to complete a WM3 assessment for IBA in line with the proposals provided in response to Condition 2.8.28 and agreed in writing with SEPA;

e) confirm compliance with the ELVs specified in Table 6.2, Table 6.2a, Table

f) 6.2b, and Table 7.1, and any Commissioning ELVs proposed under Condition 2.8.4 and agreed in writing with SEPA;

g) demonstrate the 95% confidence levels of the CEMS comply with the criteria specified in paragraph 1.3 of Part 6, Annex VI of IED;

h) confirm compliance with Quality Assurance Level (QAL) 1, 2 & 3 as specified in

i) British Standard BS EN 14181 for continuous emissions monitoring equipment;

j) confirm the gross electrical efficiency in accordance with the methodology in Condition 2.8.10;

k) confirm through a programme of monitoring including at the inlet and outlet of the Odour Extraction System and ambient monitoring of odour, the abatement efficiency, the emitted odour concentrations at Emission Point A2, and the odour emissions at the site boundary and sensitive receptors are below the 1.5 OUE/m^3 significance criterion in the SEPA Odour Guidance beyond the boundary of Permitted Installation. The ambient monitoring should be undertaken during both during normal operation and when the incinerator is not operational;

l) confirm the time required to achieve full burn out of waste when the incinerator is shutting down; and,

m) characterise those chemicals likely to be present in process effluent identified in Condition 7.1.9 in accordance with the method proposed in Condition 2.8.26b).

2.9.3 For the period of any Commissioning the Operator shall submit a monthly report containing a summary of:

a) the Commissioning undertaken during the preceding month, the phase of Commissioning this relates to and any associated Commissioning ELVs agreed in response to Condition 2.8.4;

b) an update of the detailed Commissioning Plan required by Condition 2.8.3;

c) details of all tests carried out under Condition 2.9.2 during the preceding month;

d) the results of any such tests received during the preceding month;

e) the justification for any delays from the dates notified under Condition 2.9.2 d); and

f) where appropriate, confirmation that the criteria detailed in the notification required by Condition 2.9.2 e) have been met; and,

g) notification of the time and date when the specific phase of commissioning is expected to change, or has already changed during the preceding month, to confirm which ELVs specified in Condition 2.9.2 e) apply.

2.9.4 Notwithstanding any other condition in this Permit, should any test required by Condition 2.9.2 indicate that the conditions of this Permit have not or cannot be complied with; the Operator shall cease carrying on that part of the Commissioning which is the subject of the test, until either:

a) SEPA has given written permission for said part of the Commissioning to continue; or

b) (i) the Operator has proposed in writing to SEPA remedial action to ensure compliance with the conditions of this Permit;

(ii) those actions have been agreed with SEPA in writing; and

(iii) those actions have been implemented.

2.9.5 Where Condition 2.9.4 applies, the Operator shall notify SEPA within 24 hours. Said notification shall include the following information:

a) Time and date that Commissioning was ceased;

b) Identification of the reason why Commissioning was ceased;

c) Proposals to restore compliance with the Permit; and,

d) An expected timescale for implementation of the proposals identified in 2.9.5 c).

2.9.6 Within one month of Cessation of Commissioning, the Operator shall prepare and submit to SEPA a written report which demonstrates that all of the conditions of the permit can be complied with in full.

2.10 Start-up and Shut-down

2.10.1 By 3 months prior to Commissioning of the Installation or part thereof, the Operator shall prepare implement and maintain a plan ("the Start-up and Shut-down Plan") setting out the necessary steps to be taken by the Operator prior to start-up or shutdown of operations of the Permitted Installation, or part thereof, to ensure that all appropriate preventative measures are taken against pollution and that no significant pollution is caused.

2.10.2 At least every 2 years, or whenever there is a modification which could have implications for emissions associated with Start-up or Shut-down, the Operator shall review the Start-up and Shut-down Plan required under Condition 2.10.1. Each review of the plan shall be recorded and where the Operator makes any revisions to the plan, these revisions shall be recorded.

2.11 De-commissioning

2.11.1 By 12 months after the first operation of the Installation, the Operator shall prepare and maintain a plan ("the De-commissioning Plan") for the de-commissioning of the Permitted Installation. The De-commissioning Plan shall set out the steps to be taken by the Operator after final cessation of the Permitted Activities.

2.11.2 The Operator shall notify SEPA in writing of its intention to cease the Permitted Activities, or any part thereof, for any period exceeding 12 months, no later than one month prior to the proposed date of cessation.

2.11.3 The Operator shall implement the De-commissioning Plan on final cessation of the Permitted Activities or any part thereof.

2.11.4 The Operator shall review, record and, where necessary, update the De-commissioning Plan:

a) at least every 4 years; and

b) where the Operator plans to make a substantial change in the extent or nature of the Permitted Installation.

2.12 Technical Competence and Staffing

2.12.1 All staff or persons engaged in carrying on the Permitted Activities shall be provided with adequate professional and technical development; training and written operating instructions to enable them to carry on their duties, and to ensure they are fully conversant with those aspects of the Permit Conditions which are relevant to those duties.

2.12.2 The Operator shall maintain a record of the skills and training requirements for each job and shall keep records of all relevant training.

2.12.3 The Permitted Installation shall be managed and supervised by a designated technically competent person to ensure that the conditions of the Permit are complied with.

2.12.4 The Operator shall inform SEPA in writing of all persons, and their qualifications, engaged in the operation or management of the Permitted Installation who are designated as technically competent.

2.12.5 Where the Operator or Another Relevant Person is convicted of an offence prescribed under section 74(6) of the Environmental Protection Act (EPA) 1990 for the purposes of section 74(3)(a) of EPA 1990 the Operator shall notify SEPA within 7 days of the conviction, whether or not the conviction is subsequently appealed.

2.12.6 The Operator shall notify SEPA within 7 days of any changes to the designated technically competent persons identified in Condition 2.12.4 and required by Condition 2.12.3.

2.13 Financial Provision

2.13.1 The Operator shall ensure that the financial provision as required by Regulation 18(4)(b) of the Regulations is maintained until the Permit is surrendered.

2.13.2 No later than three months prior to a proposed change to any material particular of the financial provision set in place under Condition 2.13.1, the Operator shall notify SEPA of the details of that proposed change.

2.13.3 For the purposes of Condition 2.13.2, material particulars of the financial provision used to satisfy Condition 2.13.1 shall include but not be limited to:

a) The provider of the financial instrument;

b) The type and form of financial provision; and

c) A change in any condition in relation to the financial provision including its determined value

2.13.4 The Operator shall not proceed with any proposed change to the financial provision until they have received agreement in writing from SEPA.

Table 2.1: Recording, Reporting and Notification Requirements

Required by Condition 2.2.5 and 2.3.1

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Primary and deputy point of contact with SEPA	2.1.1 2.1.2	Without delay where there is a change of contact	As right	Within 4 weeks of date of Permit

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Systems or procedures used to demonstrate compliance with a Condition of this Permit	2.1.4	As determined by variations, reviews and consolidation of permit	2 months prior to Commissioning	N/A
Non-operation during any relevant reporting period in Table 2.1	2.3.3	As required	As right	Within 1 month of end of the reporting period concerned
Waste Data Returns	2.4.1	Every 3 months 28 days from the end of each quarter	As right	First date of 28 January, 28 April, 28 July or 28 October from Commencement of Commissioning
Annual Report	2.4.2	Annually by 31 January each year	As right	Annually by 31 January each year
Incident initial report	2.5.5	N/A	As right	By next working day after identification on the Incident4
Incident investigation report	2.5.6	N/A	As right	Within 14 days of incident date unless otherwise agreed in writing with SEPA
Incident Prevention and Mitigation Plan and review thereof	2.5.7 and 2.5.8	2 years	3 months prior to Commissioning	N/A

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Resource utilisation systematic assessment and review and summary report of summary of raw material consumption efficiency / waste minimisation projects	2.6.4	4 years	Annually from first operation	First date of 31 January following first year of operation
Heat and Power Plan	2.7.2 and 2.8.5	Annually by 31 January each year	As right	6 months prior to the Commencement of Commissioning and thereafter annually by 31 January from the cessation of commissioning
Non-compliance with thermal treatment of waste targets in Condition 2.7.4	2.7.5	Single report	As right	3 months prior to deadline required by Condition 2.7.4
Construction and Commissioning Plan	2.8.2	Every 3 months	As right	31 October 2021 and every 3 months thereafter until the commencement of commissioning
Detailed Commissioning Plan	2.8.3	Every month	As right	3 months prior to Commencement of Commissioning and then monthly as required by Condition 2.9.3

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Report on proposals for Commissioning ELVs	2.8.4	Single report	As right	6 months prior to Commencement of Commissioning
Confirmation infrastructure for exporting electricity / heat or steam completed	2.8.6	N/A	As right	3 months prior to Commencement of Commissioning
CFD Modelling Report	2.8.7	N/A	As right	12 months prior to Commencement of Commissioning
Compliance methodology report to verify minimum temperature, residence time and oxygen requirements; confirm optimal position for SNCR dosing points and confirm sufficient monitoring ports	2.8.8	Single report	As right	9 months prior to Commencement of Commissioning
Report on EMS to meet requirements of BAT 1	2.8.9	Single report	As right	3 months prior to Commencement of Commissioning
Report on methodology to confirm gross electrical efficiency at full load during commissioning	2.8.10	Single report	As right	6 months prior to Commencement of Commissioning
Arrangements for continuous and periodic monitoring of emissions to air	2.8.11	Single report	As right	9 months prior to Commencement of Commissioning

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Report on proposals for mercury monitoring to meet requirements of BAT 4	2.8.12	Single report	As right	6 months prior to Commencement of Commissioning
Report on proposals for sampling of dioxins and furans and dioxin-like PCBs to meet requirements of BAT 4	2.8.13	Single report	As right	6 months prior to Commencement of Commissioning
Report on proposals for monitoring of OTNOC (BAT 5)	2.8.14	Single report	As right	6 months prior to Commencement of Commissioning
Report on techniques to limit start-up and shutdown (BAT 16)	2.8.15	Single report	As right	3 months prior to Commencement of Commissioning
Submission of OTNOC Management Plan (BAT 18)	2.8.16	Single report	As right	3 months prior to Commencement of Commissioning
Report on techniques for control of noise and vibration	2.8.17	Single report	As right	12 months prior to Commencement of Commissioning
Report on techniques for control odour	2.8.18	Single report	As right	12 months prior to Commencement of Commissioning
Standby generator design details and air quality assessment	2.8.19	Single report	As right	3 months prior to Commencement of Commissioning

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Report on first environmental monitoring results	2.8.20 and 9.1.2	Within 2 years of First operation and subsequently as agreed in writing with SEPA	As right	3 months prior to Commencement of Commissioning
Report on SUDS design	2.8.21	Single report	As right	12 months prior to Commencement of Commissioning
Drainage and sub-surface structures Plan	2.8.22	Single report	As right	6 months prior to Commencement of Commissioning
Report on fire-water containment design	2.8.23	Single report	As right	6 months prior to Commencement of Commissioning
Report on bulk storage containment	2.8.24	Single report	As right	6 months prior to Commencement of Commissioning
Decantation tank drawing and technical details	2.8.25	Single report	As right	6 months prior to Commencement of Commissioning
Arrangements for monitoring emissions to Water Environment	2.8.26	Single report	As right	6 months prior to Commencement of Commissioning
Waste acceptance procedures and inspection procedure	2.8.27	Single report	As right	3 months prior to Commencement of Commissioning
Protocol for sampling and testing of residues	2.8.28	Single report	As right	3 months prior to Commencement of Commissioning

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Drawings and technical description of waste infeed, incinerator, bottom ash system, heat recovery and steam turbine generator and flue gas cleaning system	2.8.29	Single report	As right	6 months prior to Commencement of Commissioning
Location of wastewater pits and SUDS discharge	2.8.30	Single report	As right	3 months prior to Commencement of Commissioning
Report on design of steam blowing equipment	2.8.31	Single report	As right	3 months prior to Commencement of Commissioning
Groundwater borehole and trial pit (location with design and construction details) as part of soil and groundwater monitoring plan (for whole site)	2.8.32	Single report	As right	9 months prior to first introduction of chemicals, fuels or other raw materials or wastes
Borehole and trial pit construction & soil sample collection	2.8.33	Single report	As right	6 months prior to first introduction of chemicals, fuels or other raw materials or wastes
Borehole and trial pit construction report & sampling log	2.8.34	Single report	As right	1 month after completion of the boreholes and trial pits required by Condition 2.8.32 & 2.8.33

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Groundwater and soils monitoring assessment	2.8.35	Single report	As right	2 months prior to first introduction of chemicals, fuels or other raw materials or wastes
Confirmation that design features are compliant	2.8.36	Single report	As right	Prior to Commencement of Commissioning
Commissioning progress report	2.9.3	Monthly during Commissioning	As right	One month after Commencement of Commissioning and monthly thereafter within 1 week of the end of each month
Commissioning condition 2.9.4 notification that permit conditions cannot be complied with	2.9.5	As required	As right	Within 24 hours
Final Commissioning report	2.9.6	N/A	As right	Within 1 month of Cessation of Commissioning
Start-up and Shut-down Plan	2.10.1 and 2.10.2	2 years	3 months prior to Commissioning	N/A
Decommissioning Plan	2.11.1 and 2.11.4	4 years	12 months after completion of Commissioning	N/A
Notification of Permanent cessation of Permitted Activities	2.11.2	N/A	As right	1 month prior to cessation
Skills and training requirements	2.12.2	As required	3 months prior to Commissioning	N/A

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Persons engaged in the operation or management of the installation	2.12.4	As required	As right	Prior to First Operation
Conviction of a Relevant Offence	2.12.5	As required	As right	Notification within 7 days of conviction
Notification of change in designated technically competent person(s)	2.12.6	As required	As right	Within 7 days of change
Systematic noise assessment and record of action taken	3.1.1	2 years or whenever equipment with a noise output which could have an impact on noise sensitive receptors is replaced or moved	As right	Within 3 months of the cessation of commissioning and every two years thereafter
Noise and Vibration Management Plan	3.1.2 and 3.1.3	2 years or whenever there is a change which could impact emissions	As right	3 months prior to Commencement of Commissioning
Environmental Noise report to validate the noise modelling provided in the PPC Application	3.1.6	Single report	As right	Within 4 months of the Cessation of Commissioning

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Odour Management Plan	3.2.2 and 3.2.5	2 years or whenever there is a change which could impact emissions	As right	3 months prior to the first acceptance of waste at the Permitted Installation and every 2 years thereafter
Olfactory surveys and the results of investigations and remedial action	3.2.4	As required	From issue date of permit	N/A
Notification of operation of the odour extraction system	3.2.8	As required	From issue date of permit	Within 24 hours of operation
Report on results of smoke test	3.2.9 and 3.2.10	As right	As required	At least one month prior to first acceptance of waste and thereafter as agreed in writing with SEPA
Report on smoke testing methodology	3.2.11	Single report	As right	At least one month prior to the smoke test required by condition 3.2.9
Documented system of checks, inspection and maintenance for the Odour Extraction System	3.2.12	N/A	Prior to first operation	N/A
Modelling of Odour Monitoring Results	3.2.15	Single report	As right	Within 4 months of First Operation
Weighbridge records	3.3.2	Daily	From first acceptance of waste at the Permitted Installation	N/A

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Pest control inspection and details of any subsequent treatment	3.5.2	Daily inspections and as required for subsequent treatment	From first acceptance of waste at the Permitted Installation	N/A
Record of operational management and maintenance system	3.6.1	Every 4 years	Within 6 months of First Operation	N/A
Maintenance records	3.6.2	As required	From date of First Operation	N/A
Quantity of waste incinerated	4.2.3	Monthly	From first acceptance of waste	See 2.4.1
Monitoring, recording and where practicable inspection of waste deliveries	4.3.1 and 4.3.2	Each delivery	From first acceptance of waste	N/A
Refusal to accept waste load	4.3.3	As required	As right	Within14 days unless otherwise agreed in writing with SEPA
Quarantined waste	4.3.4	As required	From first acceptance of waste	N/A
Hygiene Plan	4.4.6	As required	From first acceptance of waste	N/A
Rate at which the waste is fed into the incineration plant.	5.2.1	Hourly	From first addition of waste to the Incinerator during Commissioning	N/A
Oxygen and temperature monitoring records	5.2.2 5.2.3	Continuous	From first addition of waste to the Incinerator during Commissioning	N/A

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Non-utilisation of heat recovery system	5.2.5	Quarterly	From issue date of permit	Within 1 month of end of first calendar quarter following First Operation
Recording and Reporting of periods of abnormal operation	5.4.4 5.4.6	As required	From First Operation	Without delay as per 2.4.5, 2.5.5 and 2.5.6
Recording and Reporting of periods of OTNOC	5.4.9	As required	From First Operation	Within 1 month of end of first calendar quarter following First Operation
Review of OTNOC Management plan required by Condition 2.8.18	5.4.10	As right	As right	Every 2 years or as required from date of First Operation
Recording of tests and data used in emission correction	6.1.4	As required	From the Commencement of commissioning	N/A
Mass emissions to air	6.1.12	Annually	From issue date of permit	31 January following First Operation
Information used to estimate mass emissions to air	6.1.13	Annually	From issue date of permit	N/A
Public reporting of CEM data on internet	6.1.14	Continuous	As right	From First Operation
Results of AST & QAL 2 Tests	6.2.7	QAL2 every 5 years as required by Condition 6.2.4 & AST annually as required by Condition 6.2.5, subject to Condition 6.2.6	As right	Annually within 6 weeks of completion

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
QAL 3 procedure and associated records	6 .2.8 6.2.9	As required	One month prior to the Commencement of Commissioning	N/A
Monitoring equipment calibration inaccuracies	6.2.10	As required	As right	Within one day of identification
Continuous monitoring of emissions to air Reporting of the daily average parameters in Table 6.2a is only required if a period of OTNOC has occurred during that day	6.3.1 6.3.9	Quarterly reporting within one month of the end of each quarter.	From the Commencement of Commissioning	First date of 31 January, 30 April, 31 July or 31 October following First Operation
Operational details during periodic monitoring	6.4.1	As required	As right	As required
Periodic monitoring	6.4.5	Quarterly for first 4 occasions then six monthly thereafter	As required	Within 6 weeks of the completion of the monitoring or within one month of the end of the calendar quarter, whichever is sooner
Programme of mercury monitoring to determine whether emissions are low & stable	6.5.1	Single report	As right	Within 6 months of First Operation

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Programme of dioxin/furan and dioxin-like PCB monitoring to determine whether emissions are stable	6.5.2	Single report	As right	Within 6 months of First Operation
Report on proposals for tests to determine the size distribution of the particulate matter in emissions to air which identify the fractions in the PM10 and PM2.5	6.5.3	Single report	As right	Within 6 months of First Operation
Updated air dispersion model and human health risk assessment for Group 1,2 & 3 heavy metals based on actual emissions	6.5.4	Single report	As right	Within 15 months of First Operation
Report on proposals for the frequency of monitoring of odour at Emission point A2 and at the site boundary when the incinerator is shut down.	6.5.5	Single report	As right	Within 3 months of First Operation
Emissions to water sampling plan	7.1.6	Annually for forthcoming reporting period 1 January to 31 December	N/A	30 November annually for the following calendar year

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Mass emissions to water	7.1.7	Annually for the calendar year	As right	31 January for the previous year from Commencement of Commissioning
Information used to estimate mass emissions to water	7.1.8	Annually	As right	31 January for the previous year from Commencement of Commissioning
Effluent arisings report (tankered effluent)	7.1.9	Quarterly	As right	First date of 31 January, 30 April, 31 July or 31 October for the previous calendar quarter from the Commencement of Commissioning
Calibration and maintenance of AMS	7.2.3	As required	From issue date of permit	N/A
Electronic recording of continuously monitored effluent data	7.3.1	Continuous	From Commencement of Commissioning	First date of 31 January, 30 April, 31 July or 31 October following first operation following Cessation of Commissioning
Reporting of continuous effluent monitoring data	7.3.3	Quarterly reporting within one month of the end of each quarter	From Commencement of Commissioning	First date of 31 January, 30 April, 31 July or 31 October following first operation following Cessation of Commissioning

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Periodic effluent monitoring reports	7.4.1 and 7.4.2	As detailed in Table 7.2	From Commencement of Commissioning	First date of 31 January, 30 April, 31 July or 31 October for the previous calendar quarter from the Commencement of Commissioning
Surface Water, Drainage and Spillage Plan	7.5.2 and 7.5.5	5 years	3 months from the Commencement of Commissioning	N/A
Site Drainage Plans	7.5.6	As required	6 months from the Commencement of Commissioning	N/A
Annual inspections of impervious areas and record of remedial measures	7.5.10 and 7.5.11	Annually	From the Commencement of Commissioning	N/A
Soil and groundwater incidents	7.6.2 and 7.6.3	As required	From issue date of permit	N/A
Assessment of measures to prevent emissions to soil and groundwater	7.6.4	4 years	From issue date of permit	4 years from date of First Operation
Groundwater monitoring	7.6.5	As required/ 5 years	As right	Within 5 years of the report required by Condition 2.8.35 or as agreed in writing with SEPA

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Soil monitoring	7.6.6	10 years/ As required	As right	Within 10 years of the report required by Condition 2.8.35 or as agreed in writing with SEPA
Detailed methodology for groundwater and soil monitoring	7.6.7 and 7.6.9	Within 6 months of each monitoring event	N/A	At least 3 months in advance of carrying out the monitoring
Record of all plans, monitoring and assessments in accordance with Conditions 7.6.4, 7.6.5, 7.6.6 & 7.6.8	7.6.10	N/A	From issue date of permit	N/A
Preparation & Review of Residue management Plan	8.1.1 and 8.1.2	2 years	As right	3 months prior to the Commencement of Commissioning
TOC or LOI of bottom ash	8.1.5	As right	As right	Weekly for first 3 months of operation then quarterly Within one month of the end of each calendar quarter
Chemical composition of Air Pollution Control Residue	8.1.6	As right	N/A	Weekly for first 3 months of operation then quarterly Within one month of the end of each calendar quarter
Residue dispatches	8.1.7	Daily	From Commencement of Commissioning	N/A

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first record due to be completed	Date reports due
Protocol of Environmental sampling and analysis	9.1.1	N/A	As right	12 months prior to Commencement of commissioning
Results of environmental monitoring	9.1.2	As right	As right	3 months prior to Commencement of commissioning as detailed in Condition 2.8.20 then as detailed in Table 9.1 within 6 weeks of each round of monitoring
Tests and data used to correct reference data	10.1.4	As required by Condition 10.1.5	From Commencement of Commissioning	N/A
Periodic monitoring of emissions from standby generator	10.1.5 and 10.1.6	At the most frequent interval of a) after 1,500 hours of operation, or b) every 5 years	As right	Within 6 months of First Operation for monitoring undertaken within 4 months of First Operation and thereafter
Standby generator mass emissions to air	10.1.8	Annually	As right	First date of 31 January following First Operation
Information used to estimate mass emissions to air	10.1.9	Annually	As required by Condition 10.1.9	N/A

Table 2.2: Raw Materials

Required by Condition 2.6.3

Raw Material	Unit of Measurement
Electricity (from National Grid)	MWh
Electricity generated (parasitic loading)	MWh
Electricity generated (exported)	MWh
Total Intermediate pressure steam generated	MWh
Total Intermediate pressure steam generated (parasitic loading)	MWh
Total Intermediate pressure steam generated (exported)	MWh
Total low pressure steam generated	MWh
Total low pressure steam generated (parasitic loading)	MWh
Total low pressure steam generated (exported)	MWh
Gas oil	m^3
Lime (calcium hydroxide)	Tonnes
Powdered activated carbon	Tonnes
Ammonia Solution	Tonnes
Water	m^3
Boiler water treatment chemicals	m^3

3 CONDITIONS APPLYING TO THE PERMITTED INSTALLATION AS A WHOLE

3.1 Noise and Vibration

3.1.1 At least every 2 years, or whenever any equipment with a noise output which could have an impact on noise sensitive receptors is replaced, installed, or relocated, the Operator shall carry out a systematic assessment of noise and vibration emissions associated with the Permitted Activities, the purpose of which shall be to identify methods of preventing and reducing noise and vibration emissions. Each assessment, including any action taken, shall be recorded and reported.

3.1.2 No later than 3 months prior to the Commencement of Commissioning, the Operator shall prepare, implement, maintain and submit to SEPA a plan ("The noise and vibration management plan or NVMP"). The NVMP shall, in accordance with the findings of the report required by Condition 2.8.17, set out the steps to be taken by the Operator to prevent and reduce emissions of noise and vibration at all times and to ensure that Conditions 3.1.1 and 3.1.3 to 3.1.7 inclusive are complied with.

3.1.3 At least every 2 years or whenever there is a change which could have an impact on Emissions of noise and vibration, the Operator shall review the NVMP required under Condition 3.1.2. Each review of this plan and any revisions shall be recorded and the revised NVMP shall be reported to SEPA.

3.1.4 The NVMP referred to in Condition 3.1.2, shall include specific procedures to minimise the impact of the following:

a) Noise emissions from start-up and shut-down activities. The procedure should consider how start-up and shutdown activities are managed to minimise off-site impact particularly during the evening, night-time, weekends and during Scottish Public Holidays;

b) Noise emissions during periods where the waste incineration plant, or parts thereof, are off-line. The procedure should consider noise from both fixed and mobile equipment which is occasionally or routinely operational during these periods, and related operating times to minimise off-site impact particularly during the evening, night-time, weekends and during Scottish Public Holidays;

c) Noise emissions during steam blowing. The procedure shall include a means of communicating planned steam blowing events under Condition 2.8.31 to the local community and SEPA in advance.

3.1.5 Noise emissions associated with the Permitted Activities shall not contain any Audible Tonal noise (as defined in BS4142:2014 and assessed using narrow band analysis defined in Annex D of BS4142:2014) at any noise sensitive receptor.

3.1.6 Without prejudice to Condition 3.1.1, within 4 months of First Operation the Operator shall complete an acoustic survey designed to confirm the acoustic attenuation performance of the Permitted Installation and validate predictions contained within the PPC Application and any subsequent pre-construction noise submissions including the report required by Condition 2.8.17.

3.1.7 The acoustic survey required by Condition 3.1.6 shall be carried out to meet the requirements of BS 4142:2014 and shall be reported to SEPA within 6 months of First Operation. The acoustic survey shall include the following:

a) a series of environmental noise measurements to meet the requirements of BS4142:2014 to assess noise emissions during routine operations and foreseeable infrequent operations, including incinerator start-up and shut-down, to quantify the impact of noise emissions from the Permitted Installation at nearby noise sensitive receptors;

b) an assessment comparing the findings of the measurements required by Condition 3.1.7 a) with the noise assessment provided in the PPC Application and any subsequent pre-construction noise submissions including the report required by Condition 2.8.17. The noise sensitive receptors shall be agreed in writing with SEPA in advance;

c) details of the following:

(i) all items of plant contributing to environmental noise impact during the acoustic survey;

(ii) how specific noise emission levels were obtained;

(iii) how predicted impact figures have been determined;

(iv) any intermittency or tonal factors that may make specific noise subjectivity more annoying;

(v) compliance of noise emissions from the Permitted installation with the requirements of Condition 3.1.5; and,

(vi) a plan or plans showing the following:

- locations of noise sensitive receptors used for monitoring outside the boundary of the Permitted Installation;
- the locations for monitoring within the boundary of the Permitted Installation together with the location of key sources of on-site noise including, but not limited to, the following plant items: steam vents; the induced draft fan; the air-cooled condenser; the standby generator; fire pumps; compressors and the Turbine Hall, over-lying a site layout plan;

d) an account of the reasons for any differences between the predictions in the noise assessment provided in Section 2.4.6 and Appendix C of the PPC Application and pre-construction noise submissions including the report required by Condition 2.8.17, and the results of the acoustic survey required by Condition 3.1.6;

e) a detailed assessment of whether all reasonable steps have been employed to prevent or minimise the impact of noise emissions from the Permitted Installation on the noise sensitive receptors; and,

f) where the assessment provided in response to Condition 3.1.7 e) indicates that improvements are required, the Operator shall describe in the assessment what steps will be taken and the timescale for completion of any proposed works to make such improvements in the shortest possible time.

3.2 Odour and Odour Extraction System Conditions

3.2.1 All emissions to air from the Permitted Installation shall be free from offensive odour, as perceived by an Authorised Person, outside the Site Boundary.

3.2.2 By 3 months prior to the first acceptance of waste for use during Commissioning, the Operator shall prepare, implement, maintain and submit to SEPA an Odour Management Plan ("OMP") setting out the steps to be taken by the Operator to ensure that all appropriate preventative measures are taken against odour pollution and to ensure that Conditions 3.2.1 and 3.2.3 to 3.2.15 inclusive are complied with. Further guidance is provided in the SEPA Odour Guidance at www.sepa.org.uk.

3.2.3 The OMP shall be based on SEPA Odour Guidance and include:

a) identification of those process operations which have the potential to be odorous;

b) identification of techniques to ensure all sources of potentially offensive odours are, as far as practicable, enclosed;

c) procedures for managing odour particularly when parts of the process are shutdown;

d) a methodology for undertaking an olfactory survey of the Permitted Installation daily with a site plan to identify locations for odour checks;

e) procedures for investigation, recording and subsequent remedial action following odour complaints or detection of odour during olfactory surveys; and,

f) details of the system of operational checks, periodic inspection and planned maintenance required by Condition 3.2.12 and Condition 3.2.13 on the Odour Extraction System which is required by Condition 3.2.7.

3.2.4 The Operator shall record:

a) the results of each olfactory survey;

b) the results of each investigation and any remedial action undertaken in compliance with Condition 3.2.3e).

3.2.5 At least every 2 years, or whenever there is a change which could have an impact on Emissions of odour, the Operator shall review the OMP required under Condition 3.2.2. Each review of this plan and any revisions shall be recorded and the revised OMP shall be reported to SEPA.

3.2.6 All doors and openings to the tipping hall and areas where odour is likely to be generated shall be kept closed at all times other than to allow entry and exit of vehicles and personnel.

3.2.7 The Odour Extraction System shall be operational during any period of planned or unplanned shutdown of the incinerator until such time as all waste has been removed from the site and there is no odour present inside the Waste Reception Area.

3.2.8 The Operator shall notify SEPA in writing within 24 hours of each occasion when the Odour Extraction System is required to be operational due to the circumstances described by Condition 3.2.7. A record shall be kept of the period of operation.

3.2.9 The effectiveness of the Odour Extraction System in capturing fugitive odours shall be assessed by smoke testing by a methodology and at a frequency to be agreed by SEPA in writing and the outcomes from that assessment reported. The methodology shall cover the following two situations:

a) when the incinerator is online and the forced draft fan is extracting air from the tipping hall and waste bunker for combustion in the incineration process; and

b) when the incinerator is off-line and the air from the tipping hall and waste bunker is being collected by the air extraction system for discharge to atmosphere via the Odour Extraction System stack, Emission Point A2 in Schedule 6 of the Permit.

3.2.10 At least one month prior to first acceptance of waste at the Permitted Installation, the first smoke test for the incinerator online and offline scenarios shall be completed and the results reported to SEPA.

3.2.11 At least one month prior to carrying out the first smoke tests, the methodology for smoke testing referred to in Condition 3.2.9, shall be submitted to SEPA for agreement.

3.2.12 The Odour Extraction System shall be subject to a documented system of operational checks, periodic inspection and planned maintenance.

3.2.13 The system of operational checks, periodic inspection and planned maintenance required by Condition 3.2.12 shall define as a minimum the actions taken to:

a) identify in a timely manner that air intake or extraction points are blinded by litter or other matter to the point where the air intake or extraction rate is likely to be affected and implement effective action to remove the matter;

b) ensure that the air extraction point filters are changed routinely and before they are sufficiently blinded by dust that the extraction rate is likely to be affected and implement effective action to change the filters;

c) ensure that damage to the extraction system ductwork or equipment is identified and remedied promptly;

d) undertaken when the indicators identified in the methodology required by Condition 3.2.3 f) indicate this is required.

3.2.14 Within 2 months of receiving the results of the monitoring required by Condition 2.9.2 (i) the operator must undertake a modelling exercise using this data to confirm that the ELV for odour emissions in Table 6.2 and Table 6.2b in Schedule 6 is achieved. The report shall be consistent with the Air Dispersion Modelling Report Guidelines in Annex E of Horizontal Guidance Note IPPC H1: Environmental Assessment and Appraisal of BAT. Contour plots of odour concentrations shall be provided for each year of meteorological data used. Sensitive receptors to be included in the model shall be agreed with SEPA in advance.

3.2.15 No later than 4 months after First Operation the Operator shall report the results of the modelling exercise required by Condition 3.2.14 to SEPA.

3.3 Weighbridge

3.3.1 A calibrated weighbridge shall be provided at the permitted installation.

3.3.2 On arrival at site all waste loads shall be weighed at the weighbridge required by Condition 3.3.1 and a record of the weight maintained.

3.4 Roads and Traffic Control

3.4.1 The Operator shall ensure that all roads and surfaces within the Permitted Installation are kept free from mud and other debris to the extent necessary to prevent fouling of the public highway.

3.5 Litter, Dust and Vermin

3.5.1 All operations shall be carried out to prevent and minimise the potential escape of litter or dust from the Permitted Installation. Any litter lying within the Permitted Installation shall be removed on a daily basis.

3.5.2 All operations shall be carried out so as to minimise the potential presence of insects, birds and vermin. The Permitted Installation shall be inspected at least once per day for the presence of insects, birds or vermin, and a treatment programme shall be undertaken without delay to deal with any identified infestation. The results of each inspection and details of any subsequent treatment shall be recorded.

3.6 Environmental Management and Maintenance Systems

3.6.1 Within 6 months of First Operation, the Operator shall define, record and implement such operational management and maintenance systems as are necessary for compliance with the conditions of this Permit. The systems shall be subject to documented review at intervals of not more than 4 years.

3.6.2 All plant, instrumentation and buildings used in carrying on the Permitted Activities shall be properly maintained and the maintenance recorded.

3.6.3 The systems required by Condition 3.6.1 shall include details showing how the maintenance required, whether under a scheme of planned maintenance or consequent to a breakdown, is to be organised to ensure that emissions of potentially polluting substances are prevented or, where that is not practicable, minimised.

3.7 Sampling and Monitoring Facilities

3.7.1 Provisions for sampling measurement and monitoring at the Permitted Installation shall meet the requirements of BS EN 15259 and Environment Agency Technical Guidance Note M1.

3.7.2 Permanent means of access shall be provided at all times to enable monitoring to be carried out in relation to the emission points specified in Table 6.1 in Schedule 6, Table 7.1 in Schedule 7 and Table 10.1 in Schedule 10, unless otherwise agreed in writing by SEPA.

4 CONDITIONS APPLYING TO WASTE RECEPTION, INSPECTION AND STORAGE

4.1 Permitted Types of Waste

4.1.1 Subject to any exclusions identified in Column 2 of Table 4.2 and Conditions 4.1.2 to 4.1.6, no waste shall be accepted in the Permitted Installation other than the wastes specified in Table 4.1.

4.1.2 Notwithstanding Condition 4.1.1, no separately collected waste shall be mixed with any other waste or any material, to the extent that mixing would hamper further recycling.

4.1.3 Notwithstanding Condition 4.1.1, no separately collected waste capable of being recycled shall be incinerated.

4.1.4 Notwithstanding Condition 4.1.1, and as far as practicable, no waste containing nonferrous metals or hard plastics shall be incinerated.

4.1.5 Notwithstanding Condition 4.1.1 and 4.1.4, subject to condition 4.1.6, the incineration of waste industrial and automotive batteries is prohibited.

4.1.6 Where permitted by Condition 4.1.1, the incineration of residues of any batteries that have undergone both treatment and recycling is not prohibited provided that the treatment and recycling:

a) used best available techniques, in terms of protection of health and the environment, and

b) complied, at a minimum with UK and Scottish legislation as regards health and safety and waste management.

4.2 Permitted Quantities of Waste

4.2.1 The maximum quantity of waste stored at the Permitted Installation (including waste awaiting dispatch elsewhere) shall not exceed the quantities specified in Table 4.2. In the event that the maximum capacity of the storage facilities is reached, no further waste shall be accepted at the Permitted Installation until storage capacity becomes available.

4.2.2 The aggregate amount of the wastes specified in Condition 4.1.1 that may be incinerated in the Permitted Installation shall not exceed 310,000 Tonnes in any calendar year, and shall not exceed 41.7 Tonnes in any one hour.

4.2.3 The Operator shall record the monthly total quantity of all wastes incinerated in the Permitted Installation, and the monthly quantities of each waste specified in Table 4.1 that is incinerated in the Permitted Installation.

4.3 Waste Acceptance

4.3.1 The Permit Holder shall monitor and record all wastes and accompanying documentation entering the Permitted Installation to ensure that they are within the types/quantities permitted under the conditions of this permit.

4.3.2 Waste shall not be accepted onto the Permitted Installation unless, as a minimum, the information specified in Table 4.3 is recorded and, where practicable, the load visually inspected by a suitably trained member of staff and found to comply with the requirements of this Permit.

4.3.3 Where the Operator refuses any person permission to deposit waste at the Permitted Installation the Operator shall take all reasonable steps to obtain and record, the following details: name and address of person; registration number of vehicle; quantity and type of waste; and date and time of refusal. The details of the refusal shall be reported.

4.3.4 Accepted Wastes which are subsequently found not to conform to Permit conditions, or segregated portions of waste not permitted to undergo incineration, shall be immediately removed to the Quarantine Area required by Condition 4.4.5 pending their removal from the Permitted Installation. The 6-figure EWC number, type and quantity of any waste sent elsewhere for disposal or recovery shall be recorded.

4.3.5 Where waste is accepted and it is subsequently not possible to incinerate that waste due to failure of the incineration plant, and where the Operator removes that waste from the Permitted Installation, the 6-figure EWC number, the type and quantity of the waste and the final destination of the waste shall be recorded.

4.4 Storage of Wastes

4.4.1 Each waste storage area shall be clearly labelled. The label shall identify the material permitted to be stored in the area, maximum quantity and any hazardous properties. This information shall be legible from outwith the storage area.

4.4.2 No waste shall be transferred to the waste storage areas until it has been determined there is sufficient storage capacity for the waste.

4.4.3 The unloading of vehicles delivering wastes shall take place only within a designated area provided with impermeable hardstanding served by a drainage system that allows the isolation of any spillage from the waste, or rainwater contaminated by the waste.

4.4.4 All areas used to store waste, including residues from the incineration plant, shall be constructed in such a way that release of pollutants is prevented, and shall be covered to prevent the ingress of rainwater.

4.4.5 A designated facility/ compound ("the Quarantine Area") shall be provided for the storage of any wastes found on the Permitted Installation that are not authorised by this Permit.

4.4.6 All storage areas and associated internal and external infrastructure: walkways, floors, railings, doors, walls, ductwork, equipment etc. shall be subject to planned cleaning according to a Hygiene Plan prepared, recorded and implemented at the Permitted Installation.

4.4.7 Degradable waste shall be managed within the waste storage area/ bunker in such a way as to minimise the time in which any such waste is stored prior to Incineration.

4.4.8 For the avoidance of doubt, no waste awaiting incineration or sorting shall be stored outside the Waste Reception Area.

Table 4.1: Permitted Waste Types for Incineration at the ERC

Required by Condition 4.1.1

Wastes permitted to be incinerated		
EWC index number (six figure code)	**Description including physical form**	**Limitations and Exclusions**
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 04	Waste plastics (except packaging)	Only where material is not capable of being directly recycled.
02 01 07	Wastes from forestry	None
02 01 09	Agrochemical waste other than those mentioned in 02 01 08	None
02 02	**Wastes from the preparation and processing of meat, fish and other foods of animal origin**	
02 02 02	Animal-tissue waste	None
02 02 03	Materials unsuitable for consumption or processing	None
02 02 04	Sludges from on-site effluent treatment	None
02 06	**Wastes from the baking and confectionery industry**	
02 06 01	Materials unsuitable for consumption or processing	None
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**	
03 01	**Waste from wood processing and the production of panels and furniture**	
03 01 01	Waste bark and cork	None
03 01 05	Sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04	None
03 03	**Wastes from pulp, paper and cardboard production and processing**	
03 03 01	Waste bark and wood	None

03 03 07	Mechanically separated rejects from pulping of waste paper and cardboard	None
03 03 08	Waste from sorting of paper and cardboard destined for recycling	None
04	**Wastes from the leather and fur industry**	
04 02	**Wastes from the textile industry**	
04 02 09	Waste from composite materials (impregnated textile, elastomer, plastomer)	None
04 02 10	Organic matter from natural products (eg grease and wax)	None
04 02 21	Waste from unprocessed textile fibres	None
04 02 22	Waste from processed textile fibres	None
09 01	**Wastes from the photographic industry**	
09 01 07	Photographic film and paper containing silver or silver compounds	None
09 01 08	Photographic film and paper free of silver or silver compounds	None
15	**Waste packaging, absorbants, 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	Only where material is not capable of being directly recycled
15 01 02	Plastic packaging	Only where material is not capable of being directly recycled
15 01 03	Wooden packaging	Only where material is not capable of being directly recycled
15 01 05	Composite packaging	Only where material is not capable of being directly recycled
15 01 06	Mixed packaging	Only where material is not capable of being directly recycled
15 01 09	Textile packaging	None

15 02	**Absorbents, filter materials, wiping cloths and protective clothing**	
15 02 03	Absorbants, filter materials, wiping cloths, protective clothing other than those mentioned in 15 02 02	None
17	**Construction and demolition wastes (including excavated soil from contaminated sites)**	
17 02	**Wood, glass and plastic**	
17 02 01	Wood	Only where material is not capable of being directly recycled
17 02 03	Plastic	Only where material is not capable of being directly recycled
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	None
17 09	**Other construction and demolition wastes**	
17 09 04	Mixed construction wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	None
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	Wastes whose collection and disposal is not subject to special requirements in order to prevent infection	None
18 01 07	Chemicals other than those mentioned in 18 01 06	None
18 01 09	Medicines other than those mentioned in 18 01 08	None
18 02	**Wastes from research, diagnosis, treatment or prevention of disease involving animals**	
18 02 03	Wastes whose collection and disposal is not subject to special requirements in order to prevent infection	None

18 02 06	Chemicals other than those mentioned in 18 02 05	None
18 02 08	Medicines other than those mentioned in 18 02 07	None
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 animal and vegetable waste	None
19 05 02	Non-composted fraction of municipal and similar waste	None
19 05 03	Off specification compost	None
19 06	**Wastes from anaerobic treatment of waste**	
19 06 04	Digestate from anaerobic treatment of municipal waste	Only when the waste is not PAS100 or PAS110 Compliant
19 06 06	Digestate from anaerobic treatment of animal and vegetable waste	Only when the waste is not PAS100 or PAS110 Compliant
19 08	**Wastes from waste water treatment plants not otherwise specified**	
19 08 01	Screenings	None
19 08 05	Sludges from treatment of urban waste water	None
19 12	**Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**	
19 12 01	Paper and cardboard	Only where material is not capable of being directly recycled
19 12 04	Plastic and rubber	None
19 12 07	Wood other than that mentioned in 19 12 06	None
19 12 08	Textiles	None
19 12 10	Combustible waste (refuse derived fuel)	None
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment	None

	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	Only where material is not capable of being directly recycled
20 01 08	Biodegradable kitchen and canteen waste	Only to be processed where the waste is disallowed from being processed in a PAS 100 or PAS110 compliant facility
20 01 10	Clothes	Only where material is not capable of being directly recycled
20 01 11	Textiles	Only where material is not capable of being directly recycled
20 01 38	Wood other than that mentioned in 20 01 37	Only where material is not capable of being directly recycled
20 01 39	Plastics	Only where material is not capable of being directly recycled
20 02	**Garden and park wastes (including cemetery waste)**	
20 02 01	Bio-degradable waste	Only to be processed where the waste is disallowed from being processed in a PAS 100 or PAS110 compliant facility
20 03	**Other municipal wastes**	
20 03 01	Mixed municipal waste	Subject to pre-sorting requirements
20 03 02	Waste from markets	None
20 03 03	Street cleaning residues	None
20 03 06	Wastes from sewage cleaning	None
20 03 07	Bulky wastes	None

Table 4.2: Permitted Quantities of Waste

Required by Condition 4.3.2

Waste type	Maximum daily Tonnage within installation boundary at any one time	Waste storage arrangements
Hazardous waste – APC Residues	280 tonnes	Dedicated silos
Non-hazardous waste	6000 tonnes	Waste bunker and quarantine area
Non-hazardous waste - IBA	1200 tonnes	IBA Hall

Table 4.3: Waste Delivery Record

Required by Condition 4.3.2

Information required to be kept for each delivery of waste for Incineration
The origin(s) of the waste for Incineration comprising the delivery, including the name(s) and address(es) of the waste generator(s)
The identity of the person who transported the delivery to the premises, and the registration number of the vehicle used to make the delivery
The date and time of the delivery of the waste
The quantity of each type of waste (in tonnes) and the 6 figure EWC number for each type of waste in the delivery

5 CONDITIONS APPLYING TO THE DESIGN, OPERATION AND MAINTENANCE OF THE INCINERATION PLANT

5.1 Process Design, Operation and Maintenance

5.1.1 The incineration plant shall be designed, operated and maintained such that:

a) the unburned organic carbon present in the slag and bottom ashes is reduced to a minimum, and in any case such that the Total Organic Carbon (TOC) content of slag and bottom ashes is less than 3% or their loss on ignition (LOI) is less than 5% of the dry weight of the slag or bottom ashes;

b) an oxygen concentration of not less than 3% v/v (expressed in terms of wet gas) or 6% v/v (expressed in terms of dry gas) is maintained in the flue gases exiting the secondary combustion chamber;

c) the temperature of the flue gases exiting the secondary combustion chamber is maintained at not less than 850°C;

d) the gas residence time in the secondary combustion chamber is not less than 2 seconds, even under the most unfavourable operating conditions anticipated;

e) no waste shall be fed to the incineration plant unless the temperature in the secondary combustion chamber has reached 850°C; and,

f) no waste shall be fed to the incineration plant unless the waste streams have been mixed within the bunker to ensure a relatively homogenous feed to the furnace.

5.1.2 Each combustion chamber of the incineration plant shall be equipped with at least 1 auxiliary burner for start-up, shutdown and for maintaining combustion gas temperature.

5.1.3 During start up or shut-down or when the temperature within the combustion chamber falls below the minimum temperature required by Condition 5.1.1 c) the auxiliary burner(s) shall not be fed with fuels which can cause higher emissions than those resulting from the burning of low sulphur gas oil to BS 2869 part 2, liquefied gas or natural gas.

5.2 Monitoring and Recording Requirements

5.2.1 The Operator shall hourly record the rate at which the waste is fed into the incineration plant.

5.2.2 Whenever any waste is burnt in the incineration plant, the Operator shall continuously measure and record:

a) the concentration of oxygen in the flue gases exiting the combustion chamber at the location confirmed in the report required by Condition 2.8.7 d) and;

b) the temperature of the flue gases exiting the secondary combustion chamber at the location confirmed in the report required by Condition 2.8.7 d).

5.2.3 The measured value of each concentration or parameter required to be continuously monitored by Condition 5.2.2 shall be electronically recorded at least once during each period of 30 seconds, and the time and date of each recorded measured value shall also be recorded.

5.2.4 The electronic recording system required by Condition 5.2.3 shall incorporate an appropriate means of alerting the Operator of any potential non-compliance with Conditions 5.1.1b) or 5.1.1c) or any of the ELVs applying to continuously monitored emissions specified in Table 6.2.

5.2.5 A record shall be kept of all times when the incineration plant is operating and the heat recovery system is not utilised with the reason for the non-utilisation.

5.3 Interlocks, Control Systems and Alarms

5.3.1 At least one of the auxiliary burner(s) specified in Condition 5.1.2 shall automatically switch on to prevent the temperature of combustion gases, after the last injection of combustion air, exiting from the secondary combustion chamber falling below the temperature specified in Condition 5.1.1 c) when waste is being burned.

5.3.2 An automatic system shall be provided, maintained and tested to prevent waste feed to the incineration plant under the following situations:

a) at start up, until the temperature specified in Condition 5.1.1 c) has been reached;

b) whenever the temperature specified in Condition 5.1.1 c) is no longer maintained; or

c) whenever the Continuous Emissions Monitoring Systems (CEMS) required by Condition 6.1.3 show that the corresponding emission limit value (ELV) is being exceeded due to a disturbance or failure of the abatement system.

5.3.3 Controls and interlocks shall be provided, maintained and tested to ensure that, as soon as practicable, no waste can be fed to the incineration plant if:

a) any fan supplying combustion air to the incineration plant fails, or is not operating at the appropriate rate;

b) the induced draught fan fails, or is not operating at the appropriate rate;

c) the oxygen concentration of the flue gases exiting the secondary combustion zone is less than the minimum required by Condition 5.1.1 b);

d) the oxygen concentration monitoring required by Condition 5.2.1 a) is not taking place;

e) the temperature monitoring required by Condition 5.2.1 b) is not taking place;

f) any of the continuous monitoring devices required by Condition 6.1.3 show that the corresponding emission limit value is being exceeded;

g) the continuous monitoring required by Condition 6.1.3 is not taking place;

h) there is a stoppage, disturbance or failure of an abatement device that is likely to result in any emission limit value specified in this permit being exceeded;

i) there is a loss of electrical power to the incineration process, or to any of its safety systems; or

5.4 Abnormal Operation, Breakdowns and Other Than Normal Operating Conditions

5.4.1 In the event of a Breakdown, the Operator shall reduce or close down operations, as soon as practicable until either

a) the operator has established that the breakdown has not caused a breach of a condition of this Permit; or

b) operation in compliance with the Permit can be restored.

5.4.2 During a period of Other Than Normal Operating Conditions (OTNOC) identified in Table 5.1, the operator shall restore normal operation of the failed equipment, or replace the failed equipment as rapidly as possible.

5.4.3 Without prejudice to Condition 5.3.2(c), In the event of Abnormal Operation, the Operator shall restore normal operation of the failed equipment, or replace the failed equipment as rapidly as possible and shall under no circumstances, continue to incinerate waste for an uninterrupted period of more than four hours.

5.4.4 In the event of any periods of Abnormal Operation, the Operator shall record in writing and report to SEPA the information specified below:

a) the time and date the period of the exceedance of the emission limit value began;

b) the cause of the period of the exceedance of the emission limit value;

c) Without prejudice to Condition 5.4.2, the Operator's justification of why the cause of the period of exceedance of the emission limit value was unavoidable;

d) the nature, timing and consequences of all work undertaken by the Operator for the purpose of bringing the period of exceedance of the emission limit value to an end; and

e) the time and date the period of exceedance of the emission limit value was brought to an end, and whether this was achieved by shutting down the incineration plant.

5.4.5 The cumulative duration of Abnormal Operation shall not exceed 60 hours in any one year. Where multiple incinerators are linked by a single abatement plant the 60 hour period shall apply to all such incineration plant.

5.4.6 Any period of Abnormal Operation shall be viewed as an incident for the purposes of Conditions 2.5.1 to 2.5.6. The report required by Condition 2.5.6 in respect of any such occasion shall include the matters required to be recorded by Condition 5.4.4.

5.4.7 In the event of a Breakdown or Abnormal Operation the Emission Limit Values (ELVs) for Emissions to Air in Table 6.2a in Schedule 6 shall apply.

5.4.8 Without prejudice to Condition 5.4.7, during a period of OTNOC identified in Table 5.1, the ELVs for Emissions to Air in Table 6.2b in Schedule 6 shall apply.

5.4.9 During periods of OTNOC, the following information shall be recorded and reported to SEPA:

a) The date, time and duration of operation under OTNOC;

b) The cause of the period of OTNOC;

c) How the period of OTNOC was brought to a close;

d) The results of emission monitoring in comparison with Table 6.2b during the period of OTNOC; and, updating as a result of the period of OTNOC.

e) Whether the OTNOC Management Plan required by Condition 2.8.16 requires updating as a result of the period of OTNOC.

5.4.10 At least every 2 years, or whenever there is a change which could have an impact on Emissions to air or water during OTNOC, the Operator shall review the OTNOC management plan required by Condition 2.8.12. Each review of this plan and any revisions shall be recorded and the revised OTNOC management plan shall be reported to SEPA.

Table 5.1: OTNOC other than those covered by Condition 5.4.2

Plant failures outside of Abnormal Operation envelope to be agreed in the OTNOC Management Plan required by Prior Commissioning Condition 2.8.16.

6 CONDITIONS APPLYING TO EMISSIONS TO AIR FROM THE INCINERATION PLANT

6.1 Air Emission Conditions and Limits

6.1.1 The Emissions to air specified in Table 6.2, shall only be permitted from the emission locations specified in Table 6.1 and shall comply with the criteria in Conditions 6.1.6 to 6.1.11 and Condition 6.1.14.

6.1.2 Any percentage limit specified in Table 6.2, Table 6.2a or Table 6.2b shall be based on the averaging period and time span specified in Table 6.2, Table 6.2a or Table 6.2b, where the percentage is the percentage of averaging periods within the time span that must not exceed the percentage limit. Compliance with the limits specified in Table 6.2, Table 6.2a or Table 6.3b shall be assessed as described in Conditions 6.3.1 to 6.3.9 and Conditions 6.4.1 to 6.4.5.

6.1.3 The Operator shall carry out continuous (C) monitoring and periodic monitoring (also known as spot sampling, SS) of Emissions of the parameters specified in Table 6.2 Table 6.2a or Table 6.2b and Table 6.3, at the sampling location(s) specified in Table 6.1, and subject to the requirements for monitoring specified in Table 6.2 and Table 6.3.

6.1.4 For any parameter specified in Table 6.2, Table 6.2a or Table 6.2b other than smoke and odour, all results of monitoring carried out under Condition 6.1.3 shall be corrected to the reference conditions 273K, 101.3 kPa, and at the relevant oxygen concentration specified in Condition 6.1.5. The results of all tests and data used to correct the monitoring results to the reference condition specified in this Condition shall be recorded.

6.1.5 For the purposes of Condition 6.1.4, the relevant oxygen concentration shall be expressed as 11%v/v for waste incineration plants, dry gas.

6.1.6 No continuously monitored daily average concentration in gaseous releases other than carbon monoxide, calculated and recorded as required by Conditions 6.3.1 to 6.3.8, shall exceed the daily average limit for that parameter in Table 6.2.

6.1.7 At least 97% of continuously monitored daily average concentration of carbon monoxide in gaseous releases over the year, calculated and recorded as required by Conditions 6.3.1 to 6.3.8, shall not exceed the daily average limit for that parameter in Table 6.2.

6.1.8 Subject to Condition 5.4.7 and Condition 5.4.8, the reported values for the continuously monitored concentrations of those substances in Table 6.2 in gaseous releases, other than carbon monoxide, calculated and recorded as required by Conditions 6.3.1 to 6.3.8, shall comply with at least one of the criteria stipulated below:

a) Over the calendar year, no half hourly average reported values shall exceed the relevant concentration limit stipulated in Table 6.2; or

b) Over the calendar year, 97% of the half hourly average reported values shall not exceed the relevant concentration limit stipulated in Table 6.2.

6.1.9 Subject to Condition 5.4.7 and Condition 5.4.8, the reported values for the continuously monitored concentration of carbon monoxide in gaseous releases, calculated and recorded as required by Conditions 6.3.1 to 6.3.8, shall comply with at least one of the criteria stipulated below in any 24 hour period:

a) no half hourly average reported values shall exceed the relevant concentration limit stipulated in Table 6.2; or

b) 95% of the 10 minute average reported values shall not exceed the relevant concentration limit stipulated in Table 6.2.

6.1.10 Subject to Condition 5.4.7 and 5.4.8, all reported values for the concentration of those periodically monitored substances in gaseous releases listed in Table 6.2, calculated and recorded as required by Conditions 6.4, shall not exceed the relevant concentration limit stipulated in Table 6.2.

6.1.11 Emissions to air from the stack A1 other than water vapour or steam shall be colourless and free from persistent mist, fumes and droplets.

6.1.12 The Operator shall record and report the mass emission results as kg of pollutant per tonne waste incinerated and kg of pollutant per year for the parameters of the combined stack emissions specified in Table 6.2. The methods used shall make reference to the guidance provided in the SPRI section of www.sepa.org.uk and shall be agreed in writing with SEPA. This information shall be reported in a format agreed in writing with SEPA.

6.1.13 Information used to estimate mass emissions in compliance with Condition 6.1.12 shall be recorded.

6.1.14 From the date of first operation continuous emissions monitoring data shall be made publically available on a section of the Operators website in a format and at a frequency agreed by SEPA.

6.2 Monitoring Requirements and Standards

6.2.1 The device, or devices, employed for the continuous monitoring of any substance listed in Table 6.2 shall have a 95% confidence interval that, for a single measured result, does not exceed the relevant percentage of the emission limit value specified in Annex VI Part 6 Section 1.3 of IED or as otherwise agreed with SEPA

6.2.2 Continuous Emissions Monitoring Systems (CEMS) shall be certified in accordance with BS EN 15267-3 and QAL1 of BS EN 14181.

6.2.3 All new CEMS shall have certification as required by Condition 6.2.2 and have a certified range which is not greater than 1.5 times the daily emission limit value (ELV).

6.2.4 In compliance with BS EN 14181, CEMS employed for monitoring of any substance listed in Table 6.2 shall:

a) be calibrated at least every 5 years by parallel measurements using the current Comité Européen de Normalisation (CEN) standard ("the QAL2 Test"); or

b) where no CEN standard is available (and only in that circumstance): be calibrated using the relevant default calibration method given in Table 6.2.

6.2.5 At least once per year, the Operator shall undertake an appropriate series of tests on all CEMS in compliance with the Annual Surveillance Test (AST) requirements of BS EN 14181.

6.2.6 The tests required by conditions 6.2.4 and 6.2.5 shall demonstrate the satisfactory operation of the CEMS and confirm that the relevant CEMS for each substance specified in Table 6.2 complies with the relevant confidence levels referred to in Condition 6.2.1.

6.2.7 The results of the QAL2 Test referred to in Condition 6.2.4 and the AST referred to in Condition 6.2.5 shall be recorded and reported, in writing, to SEPA.

6.2.8 The Operator shall, in compliance with QAL3 of BS EN 14181, have a documented procedure describing the regular checks and maintenance of the CEMS. The procedure shall describe the requirements for:

a) measuring zero and span values ("zero and span checks");

b) plotting these values by use of control charts; and

c) using the control charts to determine whether the CEMS has gone out with control chart tolerance limits as specified in BS EN 15267-3, and whether this is caused by a random or systematic error.

6.2.9 Data from the zero and span checks referred to in Condition 6.2.8 a) shall be maintained by the Operator. Should the control chart tolerance limits referred to in Condition 6.2.8 c) be exceeded, this shall trigger an alarm in a control room or other appropriate location as agreed with SEPA. If the control chart tolerance limit is exceeded the CEMS shall be regarded as out of operation until the cause is investigated and rectified.

6.2.10 The Operator shall record all maintenance and calibration work carried out on any CEMS required by Conditions 6.2.4 to 6.2.9. If any calibration work identifies that there has been an under or over estimation of any emissions greater than the confidence level referred to in Condition 6.2.1 for that parameter listed in Table 6.2, or that there has been a failure of the QAL2 or AST, this fact shall be notified to SEPA by first class post, email or fax by the next working day after the identification.

6.2.11 Reporting of calibration work carried out on the CEMS shall be carried out in accordance with the requirements of the standards specified in BS EN ISO/IEC 17025 and CEN/TS 15675 unless otherwise agreed in writing with SEPA.

6.2.12 The technique employed for the periodic monitoring of any substance listed in Table 6.2 shall be:

a) the current CEN standard; or

b) where no CEN standard is available (and only in that circumstance): the default method for that substance as appropriate; or

c) alternative methods may be used provided the Operator can demonstrate equivalence to the relevant CEN standard by using CEN/TS 14793.

6.2.13 Monitoring personnel, equipment and organisations shall have a quality system accredited to both BS EN ISO/IEC 17025 and CEN/TS 15675, as appropriate and laboratory analysis shall be carried out by an organisation accredited to ISO/IEC 17025 unless otherwise agreed in writing with SEPA.

6.3 Data Handling and Reporting - Continuous Emissions Monitoring

6.3.1 The measured value of each concentration or parameter required to be continuously monitored by Condition 6.1.3 shall be electronically recorded as required by Table 6.2 and the time and date of each recorded measured value shall be recorded. The collection of recorded measured values of any concentration or parameter shall be referred to as the 'measured value data set' for that concentration or parameter.

6.3.2 The measured value data sets for concentrations of each continuously monitored substance other than oxygen (or moisture, if sample is not taken on dry basis), shall be electronically filtered on a real time basis as specified in Condition 6.3.3 and for air emissions, corrected on a real time basis as specified in Condition 6.3.4, in order to produce reported value data sets.

6.3.3 Each reported value data set shall:

a) exclude measured values recorded during any zero, span and calibration checks on the instrument which gave rise to the values;

b) exclude measured values recorded during the start-up and shut-down periods during which no waste was being incinerated;

c) exclude measured values recorded during the failure of monitoring equipment or other equipment that could affect the accuracy of the measurement of the concentration of those substances.

6.3.4 Each measured value for concentrations of those continuously monitored substances listed in Table 6.2, other than oxygen and carbon monoxide, which is included within a reported value data set shall:

a) have the relevant confidence interval specified in Condition 6.2.1 subtracted on a real time basis, with a minimum value of zero after subtracting the confidence interval; and

b) be corrected on a real time basis to the reference conditions specified in Condition 6.1.4 using the contemporaneously recorded temperature, pressure, and oxygen concentration.

6.3.5 Subject to Conditions 6.3.6 and 6.3.8, the reported value data sets for concentrations of those continuously monitored substances listed in Table 6.2, other than oxygen and carbon monoxide, shall be divided into discrete and consecutive 30 minute subsets (commencing each hour and half hour) and similar 24 hour subsets (commencing at 00h00 each day), and the average concentration of the respective substance for each such subset shall be calculated and recorded within one minute of the subset becoming complete.

6.3.6 To obtain the daily average reported value data set for any substance as required in Condition 6.3.5:

a) no more than five half-hourly average reported value data sets in any day shall be excluded, as required by Condition 6.3.3 a) and 6.3.3 c), due to a malfunction or maintenance of the continuous monitoring system;

b) all half hourly average values recorded during periods of Abnormal Operation and OTNOC shall be excluded from the daily average reported value data set; and,

c) no more than ten daily average reported value data sets shall be excluded per year due to malfunction or maintenance of the continuous monitoring system.

6.3.7 With reference to Conditions 6,3,5, 6.3.6 and 6.3.8 the circumstances under which a data set may still be valid due to a malfunction or maintenance of the continuous monitoring system, even though a part of the data set is invalid, are detailed in Table 6.4.

6.3.8 The reported value data set for the concentration of carbon monoxide shall be divided into discrete and consecutive 10 minute subsets (commencing at 0, 10, 20, 30, 40 and 50 minutes past each hour) and similar discrete 30 minute subsets (commencing each hour and half hour) based on a rolling 24 hour period, and 24 hour subsets (commencing at 00h00 each day), and the average concentration of carbon monoxide for each such subset shall be calculated and recorded within one minute of the subset becoming complete. All half hourly average values and 10 minute average values recorded during periods of Abnormal Operation and OTNOC shall be excluded from the daily average reported value data set.

6.3.9 The Operator shall submit a quarterly report containing, as a minimum, the following:

a) daily average reported value data sets measured and calculated in accordance with Conditions 6.3.1 to 6.3.8, as appropriate;

b) for emissions to air, maximum half-hourly or maximum 10 minute average reported value data sets calculated in accordance with Conditions 6.3.5 or 6.3.8 for each day;

c) for emissions to air, for each reporting period, the percentage of half hourly or 10 minute average reported value data sets calculated in accordance with Conditions 6.3.5 or 6.3.8 that exceed the emission limit value in column 3 of Table 6.2;

d) graphical representations of the data required by Conditions 6.3.9(a), (b) and (c);

e) any reported value data set that exceeds the relevant percentage compliance level for that substance;

f) the number of hours the incineration plant was operated during each week covered by the report.

6.4 Data Handling and Reporting - Periodic Monitoring

6.4.1 Whenever periodic monitoring of any substance listed in Table 6.2 is being performed the Operator shall record or cause or require to be recorded:

a) the types of waste being fed to the primary combustion zone during the sampling period, and the average feed rate (tonnes per hour);

b) any abnormal operating conditions, ~~or~~ breakdowns or OTNOC that occurred during the sampling period;

c) details of any relevant continuous monitoring reported values for the period which coincides with the sampling period;

d) the mass of that substance collected during the said sampling period;

e) for air emission monitoring, the volume of gas extracted during the sampling period;

f) any periods when auxiliary fuel was being burned during or prior to the sampling period; and

g) the percentage of the maximum continuous rating, the steam production rate (tonnes per hour) and the estimated average net calorific value (NCV) of the waste being burned during the sampling period.

6.4.2 Dioxins & Furans and Dioxin-like PCB's shall be reported as multiplied by the Toxic Equivalence Factors as specified in Table 6.5.

6.4.3 Polycyclic Aromatic Hydrocarbons (PAHs) shall be reported as calculated using the molecular mass of the individual PAH specified in the footnote of Table 6.2.

6.4.4 The emission concentration values, standardised where appropriate to the reference condition specified in Condition 6.1.4, for those substances listed in Table 6.2 shall be calculated from the information detailed in Condition 6.4.1 d) and 6.4.1 e).

6.4.5 The Operator shall report to SEPA in writing the results of all periodic monitoring, in accordance with the requirements of BS EN ISO/IEC 17025 and CEN/TS 15675. Said report shall include the information specified in Condition 6.4.1.

6.5 Monitoring Programmes

6.5.1 Within 6 months of First Operation, the operator shall carry out a programme of mercury monitoring, and submit a report to SEPA with an analysis of whether mercury emissions can be considered to be low and stable. The monitoring shall be carried out at Emission Point A1 in Table 6.1, over a period and frequency agreed with the SEPA.

6.5.2 Within 6 months of First Operation, the operator shall carry out a programme of dioxins and furans, and dioxin-like PCB monitoring, and submit a report to SEPA with an analysis of whether dioxin and furans emissions can be considered to be stable. The monitoring shall be carried out at Emission Point A1 in Table 6.1, over a period and frequency agreed with the SEPA.

6.5.3 Within 6 months of First Operation the operator shall submit a written report to SEPA, with proposals to carry out tests to determine the size distribution of the particulate matter in the exhaust gas emissions to air which identify the fractions in the PM10 and PM2.5 ranges from Emission Point A1. The report shall detail a timetable for undertaking said tests and producing a report of the results.

6.5.4 Within 15 months of First Operation the operator shall submit in writing to SEPA, an updated air dispersion modelling assessment and updated Human Health Risk Assessment for NO_2, SO_2, PM_{10} and $PM_{2.5}$, VOCs as benzene, VOCs as 1,3 butadiene, dioxins and furans, dioxin-like PCBs and Group 1, 2 and 3 heavy metals based on emissions at actual concentrations from Emission Point A1 at the point of maximum deposition and at sensitive receptors. The report shall include modelling of speciated Group 3 metals based on results of periodic monitoring from Emission Point A1, impact assessment based on H1 methodology and a review of appropriate UK/ Scottish background data particularly for chromium/chromium VI ratios for calculation of the predicted environmental concentration.

6.5.5 Without prejudice to Condition 2.9.2 (i), within 3 months of First Operation the operator shall submit a written report to SEPA on the proposals for the frequency of monitoring of odour at Emission point A2 and at the site boundary and sensitive receptors at locations to be agreed in writing with SEPA for occasions when the incinerator is shut down.

Table 6.1: Emission Points Details

Required by Condition 6.1.1

Emission point ref. / location on site plan	A1	A2
Emission Source	EfW Stack	Odour Stack
Stack Height (m)	90	58
Diameter Cross Sectional Area (m)	2.64	1.8
NGR	NS 78550 68674	NS 78544 68604

Table 6.2: Emissions to Air ELVs applicable to normal operating conditions and monitoring requirements

Required by Condition 6.1.1

Emission Point	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1	Particulate Matter	5 mg/Nm^3	Daily average	Continuous measurement	BS EN 14181 BS EN 15267-3
		30 mg/Nm^3	100% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		10 mg/Nm^3	97% ½ hour	Continuous measurement	BS EN 14181 BS EN 15267-3
		10 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement – Quarterly for first year then bi-annual	BS EN 13284
A1	Oxides of nitrogen (NO and NO2 expressed as NO2)	120 mg/Nm^3	Daily average	Continuous measurement	BS EN 14181 BS EN 15267-3
		400 mg/Nm^3	100% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		200 mg/Nm^3	97% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		200 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then bi-annual	BS EN 14792

Emission Point	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1	Sulphur dioxide	30 mg/ Nm^3	Daily average	Continuous measurement	BS EN 14181 BS EN 15267-3
		200 mg/ Nm^3	100% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		50 mg/ Nm^3	97% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		60 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then bi-annual	BS EN 14791 / Alternative method based on BS EN 14791
A1	Carbon monoxide	50 mg/ Nm^3	Daily average	Continuous measurement	BS EN 14181 BS EN 15267-3
		100 mg/ Nm^3	100% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		150 mg/ Nm^3	95% 10 minute average	Continuous measurement	BS EN 14181 BS EN 15267-3
		100 mg/ Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then bi-annual	BS EN 15058
A1	Gaseous and vaporous organic substances expressed	10mg/Nm^3	Daily average	Continuous measurement	BS EN 14181 BS EN 15267-3

Emission Point	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
	as Total Organic Carbon (TOC)	20mg/Nm^3	100% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		10mg/Nm^3	97% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		10mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then bi-annual	BS EN 12619
A1	Hydrogen chloride	6 mg/Nm^3	Daily average	Continuous measurement	BS EN 14181 BS EN 15267-3
		60 mg/Nm^3	100% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		10 mg/Nm^3	97% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		12 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then bi-annual	BS EN 1911
A1	Hydrogen Fluoride (HF)	1 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then bi-annual	BS ISO 15713

Emission Point	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1	Ammonia (NH3)	10 mg/Nm^3	Daily average	Continuous measurement	BS EN 14181 BS EN 15267-3
		20 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then bi-annual	Based on BS EN 14791
A1	Nitrous oxide (N2O)	None set	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then bi-annual	BS EN 21258
A1 Note 1	Cadmium & thallium and their compounds (total)	0.02 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then bi-annual	BS EN 14385
A1 Note 1	Mercury and its compounds	20 ug/Nm^3 (Continuous or periodic), or 10 ug/Nm^3 Long-term sampling	See Note 2: daily average, long-term average or average value of three consecutive measurements of at least 30 minutes each	See Note 2. Periodic monitoring to be undertaken this should be undertaken Quarterly for first year then bi-annual.	BS EN 14181, BS EN 15267-3, BS EN 14884 or BS EN 13211. Note 2
A1 Note 1	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.3 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then bi-annual	BS EN 14385

Emission Point	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1	Dioxins / furans (ITEQ)	0.06 ng I-TEQ/Nm^3 (Long-term sampling) or 0.04 ng I-TEQ/Nm^3 (Periodic monitoring)	Monthly average or Average value over single measurement of 6 to 8 hours Note 3	Continuous sampling or Periodic Measurement - Quarterly for first year then bi-annual Note 3	No EN Standard for long-term sampling or BS EN 1948-2 and 3
	Dioxins / furans (WHO-TEQ Humans / Mammals)	-			
	Dioxins / furans (WHO-TEQ Fish)	-			
	Dioxins / furans (WHO-TEQ Birds)	-			
A1	Dioxins / furans + Dioxin-like PCBs	0.08 ng WHO-TEQ/ Nm^3 (Long-term sampling) or 0.06 ng WHO-TEQ/ Nm^3 (Periodic monitoring) Note 4	Monthly average or Average value over single measurement of 6 to 8 hours Note 4 and 5	Continuous sampling or Periodic Measurement - Quarterly for first year then bi-annual Note 4 and 5	No EN Standard for long-term sampling; BS EN 1948-2 and 3 or BS EN 1948-1, 2 and 4
	Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	-			
	Dioxin-like PCBs (WHO-TEQ Fish)	--			

Emission Point	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
	Dioxin-like PCBs (WHO-TEQ Birds)				
A1	Total and speciated poly-cyclic aromatic hydrocarbons Note 6	-	Average over 3 consecutive samples	Periodic Measurement Quarterly for first year then bi-annual	BS ISO 11338-1 and BS-ISO 11338- 2.
A1	Smoke	Ringelmann shade 1	During start up	As required	Visual assessment to BS 2742:1969 (as amended)
A2	Odour	1.5 OUE/m^3 as 98th percentile) of hourly averages to be determined at site boundary	Average over 3 consecutive measurements	As required by Condition 2.9.2 i) and subsequently when the incinerator is shutdown to a frequency to be agreed in writing with SEPA	BS EN 13725

Notes:

1. *Average values include the gaseous and vapour forms of the relevant heavy metal emissions as well as their compounds.*
2. *Long-term sampling applies where the report submitted under Condition 6.5.1 confirms that the waste feed does not have a proven low and stable mercury content.*
3. *The limit of 0.06 ng I-TEQ/Nm3 for long-term sampling of dioxins and furans applies where the report submitted under Condition 6.5.2 confirms that the emission levels of dioxins and furans are not sufficiently stable and the concentration of dioxin-like PCBs does not exceed 0.01 ng/Nm3.*
4. *The limit of 0.08 ng I-TEQ/Nm3 for long-term sampling of dioxins and furans and dioxin-like PCBs applies where the report submitted under Condition 6.5.2 confirms that the emission levels of dioxins and furans and dioxin-like PCBs are not sufficiently stable and the concentration of dioxin-like PCBs exceed 0.01 ng/Nm3.*

5. *The joint ELV for dioxins and furans and dioxin-like PCBs is only applicable where the report submitted under Condition 6.5.2 confirms that the concentration of dioxin-like PCBs exceed 0.01 ng/Nm3.*
6. *Total PAHs to be reported expressed as Benzo(a)pyrene and the following speciated PAHs require monitoring: 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, cylclopenta (c,d)pyrene, dibenzo[ah]anthracene, dibenzo(ai)pyrene, fluoranthene, indeno(1,2,3-cd)pyrene and napthalene.*

Table 6.2a: Emissions to Air ELVs applicable to Abnormal Operation [Note 1] (Condition 5.4.6 requirements) and monitoring requirements

Emission Point	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 (See Condition 5.4.7)	Particulate matter	150 mg/Nm^3	100% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
	TOC	20 mg/Nm^3	100% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
	Carbon monoxide	100 mg/Nm^3	100% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3

Notes:

1. *As defined in the Interpretation of Terms.*

Table 6.2b: Emissions to Air ELVs applicable to all periods of OTNOC other than periods of Abnormal Operation [Note 1] and monitoring requirements

Required by Condition 6.1.1

Emission Point	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1	Particulate Matter	10 mg/Nm^3	Daily average	Continuous measurement as required by the OTNOC Management Plan [Note 2]	BS EN 14181 BS EN 15267-3
		30 mg/Nm^3	100% ½ hour average	Continuous measurement as required by the OTNOC Management Plan [Note 2]	BS EN 14181 BS EN 15267-3
		10 mg/Nm^3	97% ½ hour	Continuous measurement as required by the OTNOC Management Plan [Note 2]	BS EN 14181 BS EN 15267-3
		30 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement as required by the OTNOC Management Plan [Note 2]	BS EN 13284
A1	Oxides of nitrogen (NO and NO2 expressed as NO2)	200 mg/Nm^3	Daily average	Continuous measurement as required by the OTNOC Management Plan [Note 2]	BS EN 14181 BS EN 15267-3

		400 mg/Nm^3	100% ½ hour average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3
		200 mg/Nm^3	97% ½ hour average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3
		200 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement as required by the OTNOC Management Plan Note 2	BS EN 14792
A1	Sulphur dioxide	50 mg/ Nm^3	Daily average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3
		200 mg/ Nm^3	100% ½ hour average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3
		50 mg/ Nm^3	97% ½ hour average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3

		200 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement as required by the OTNOC Management Plan Note 2	BS EN 14791 / Alternative method based on BS EN 14791
A1	Carbon monoxide	50 mg/ Nm^3	Daily average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3
		100 mg/ Nm^3	100% ½ hour average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3
		150 mg/ Nm^3	95% 10 minute average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3
		100 mg/ Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement as required by the OTNOC Management Plan Note 2	BS EN 15058
A1	Gaseous and vaporous organic substances expressed as Total Organic Carbon (TOC)	10mg/Nm^3	Daily average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3
		20mg/Nm^3	100% ½ hour average	Continuous measurement as	BS EN 14181

				required by the OTNOC Management Plan Note 2	BS EN 15267-3
		10mg/Nm^3	97% ½ hour average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3
		20mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement as required by the OTNOC Management Plan Note 2	BS EN 12619
A1	Hydrogen chloride	10 mg/Nm^3	Daily average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3
		60 mg/Nm^3	100% ½ hour average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3
		10 mg/Nm^3	97% ½ hour average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3
		60 mg/Nm^3	Average value of three consecutive	Periodic Measurement as required by the	BS EN 1911

			measurements of at least 30 minutes each	OTNOC Management Plan Note 2	
A1	Hydrogen Fluoride (HF)	1 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement as required by the OTNOC Management Plan Note 2	BS ISO 15713
A1	Ammonia (NH3)	10 mg/Nm^3	Daily average	Continuous measurement as required by the OTNOC Management Plan Note 2	BS EN 14181 BS EN 15267-3
		20 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement as required by the OTNOC Management Plan Note 2	Based on BS EN 14791
A1	Nitrous oxide (N2O)	-	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement as required by the OTNOC Management Plan Note 2	BS EN 21258
A1 Note 2	Cadmium & thallium and their compounds (total)	0.05 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement as required by the OTNOC Management Plan Note 2	BS EN 14385
A1	Mercury and its compounds	0.05 mg/Nm^3	Daily average, average value of three consecutive measurements of at least 30 minutes each or long-term sampling as agreed in writing	Continuous, periodic or long-term monitoring - As required by the OTNOC Management plan Note 2 and as agreed in writing with	BS EN 14181, BS EN 15267-3, BS EN 14884 or BS EN 13211.

			with SEPA following the outcome of Condition 6.5.1	SEPA following the outcome of Condition 2.8.12	
A1	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.5 mg/Nm^3	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement as required by the OTNOC Management Plan Note 2	BS EN 14385
A1	Dioxins / furans (ITEQ)	0.1 ng/Nm^3	Long-term average or average value over single measurement of 6 to 8 hours as agreed in writing with SEPA following the outcome of Condition 6.5.2.	Long-term sampling or periodic - As required by the OTNOC Management plan Note 2 and as agreed in writing with SEPA following the outcome of Condition 2.8.13.	BS EN 1948-1, 2 and 3
	Dioxins / furans (WHO-TEQ Humans / Mammals)	-			
	Dioxins / furans (WHO-TEQ Fish)	-			
	Dioxins / furans (WHO-TEQ Birds)	-			
A1	Dioxins / furans + Dioxin-like PCBs	-	Long-term average or average value over single measurement of 6 to 8 hours as agreed in writing with SEPA following the outcome of Condition 6.5.1.	Long-term sampling or periodic - As required by the OTNOC Management plan Note 2 and as agreed in writing with SEPA following the outcome of Condition 2.8.13.	BS EN 1948-1, 2 and 4
	Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	-			
	Dioxin-like PCBs (WHO-TEQ Fish)	--			
	Dioxin-like PCBs (WHO-TEQ Birds)				

A1	Specific individual poly-cyclic aromatic hydrocarbons (PAHs) Note 4	-	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement as required by the OTNOC Management Plan Note 2	BS ISO 11338-1 and BS-ISO 11338- 2.
A1	Smoke	Ringelmann shade 1	During start up	Periodic Measurement as required by the OTNOC Management Plan Note 2	Visual assessment to BS 2742:1969 (as amended)
A2	Odour	1.5 OUE/m^3 as 98^{th} percentile) of hourly averages to be determined at site boundary	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement as required by the OTNOC Management Plan Note 2	BS EN 13725

Notes:

1. *As defined in the Interpretation of Terms.*
2. *The OTNOC Management Plan as approved after completion of pre-operational condition 2.8.12 and which is maintained and reviewed according to Condition 5.4.10.*
3. *Average values include the gaseous and vapour forms of the relevant heavy metal emissions as well as their compounds.*
4. *Total PAHs to be reported expressed as Benzo(a)pyrene and the following speciated PAHs require monitoring: 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, cylclopenta (c,d)pyrene, dibenzo[ah]anthracene, dibenzo(ai)pyrene, fluoranthene, indeno(1,2,3-cd)pyrene and napthalene.*

Table 6.3: Process monitoring requirements

As Required by Condition 6.1.3

Parameter	Location or description of point of measurement	Monitoring frequency	Monitoring standard or method	Other specifications
Exhaust gas temperature	A1	Continuous	BS EN 16911-2	As agreed in writing with SEPA
Exhaust gas pressure	A1	Continuous	BS EN 16911-2	As agreed in writing with SEPA
Exhaust gas oxygen content	A1	Continuous	BS EN 14181 BS EN 15267-3	
Exhaust gas water vapour content	A1	Continuous	BS EN 14181 BS EN 15267-3	Unless gas is dried before analysis of emissions
Exhaust gas velocity (m/s) and/ or volumetric flow (m^3 /Hour)	A1	Continuous	BS EN 16911-2	As agreed in writing with SEPA
		Periodic Measurement - Quarterly for first year then bi-annual	BS EN 16911-2	

Table 6.4: Condition 6.3.7 Exceptions

Required by conditions 6.3.5, 6.3.6, 6.3.7 & 6.3.8

Time Average Basis	Invalidation Threshold
Daily Average (24 hours) based on 30 minute averages	More than five invalid 30 minute averages where the 30 minute averages are based on less than 20 minutes of data for each calendar day period where the plant is operational for all 24 hours
30 Minute average	Invalid average = A 30 minute average based on less than 40 data points (or 20 minutes of relevant data captured at acquisition rates of less than once every 30 seconds)
10 Minute average	Less than 14 data points (or less than 7 minutes of relevant data captured at acquisition rates of less than once every 30 seconds)

Table 6.5: Toxic Equivalence Factors for Dioxins, Furans and Dioxin-like PCBs

Required by Condition 6.4.2

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

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

TEF Schemes for dioxin like PCBs			
Congener	**WHO-TEF**		
	2005	**1997/8**	
	Humans / Mammals	**Fish**	**Birds**
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
	Humans / Mammals	**Fish**	**Birds**
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

TEF Schemes for dioxin like PCBs			
Congener	**WHO-TEF**		
	2005	**1997/8**	
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

Notes:

Any reference to the toxic equivalent concentration of either a polychlorinated dibenzo-p-dioxin (referred to as a "dioxin"), a polychlorinated dibenzofuran (referred to as a "furan"), or dioxin-like polychlorinated biphenyls (referred to as a "PCB") in emissions to air or water shall mean the concentration of that dioxin, furan or PCB multiplied by the toxic equivalence factor for that dioxin, furan or PCB.

Any reference to the toxic equivalent concentration of all dioxins and furans means the sum of the toxic equivalent concentrations of all the dioxins and furans.

Whenever the toxic equivalent concentration of all dioxins is calculated the minimum concentration for any dioxin or furan shall be the measurement technique's level of detection for that dioxin or furan.

Dioxins & furans shall be calculated and reported using the International toxic equivalency factors (I-TEF) and World Health Organisation toxic equivalency factors (WHO-TEF); PCB's shall be calculated and reported using the World Health Organisation toxic equivalency factors (WHO-TEF).

7 CONDITIONS APPLYING TO EMISSIONS TO THE WATER ENVIRONMENT AND SOIL FROM THE INCINERATION PLANT

7.1 Water Emission Conditions and Limits

7.1.1 The emissions to water specified in Table 7.1 shall only be permitted from the emission points and to the destinations specified in that table, and only after having passed through the sample points specified in that table.

7.1.2 Emissions of contaminated surface water or process effluent to the Water Environment from the Permitted Installation are not permitted.

7.1.3 Other than as specifically permitted or limited by any condition of this Permit, and without prejudice to Condition 7.1.2, none of the Permitted Activities shall have a significant adverse impact on, or cause pollution of, the Water Environment.

7.1.4 None of the emissions to water specified in Table 7.1 shall exceed the limit, be outwith the range or be outwith the criteria, as appropriate, for the parameters specified in said table.

7.1.5 Measurement and/or sampling of the emissions in Table 7.1 shall be carried out by the Operator at the sampling locations specified in that Table subject to the requirements for monitoring specified in Table 7.2.

7.1.6 A sampling plan shall be agreed in writing with SEPA and shall be maintained and reviewed annually. Said sampling plan shall detail how measurements for the determination of concentrations of water polluting substances shall be carried out representatively. The reviewed sampling plan shall be reported each year for the forthcoming calendar year.

7.1.7 The Operator shall record and report the mass emission results as kg of pollutant per tonne waste incinerated and kg of pollutant per year for the parameters of the combined emission points to water specified in Table 7.1. The method's used shall make reference to the guidance provided in the SPRI section of www.sepa.org.uk and shall be agreed in writing with SEPA. This information shall be reported in a format agreed in writing with SEPA.

7.1.8 The information used to estimate mass emissions in compliance with Condition 7.1.7 shall be recorded for each estimate.

7.1.9 Without prejudice to the report required by Condition 2.4.1, the Operator shall submit a quarterly report containing details of all loads of process effluent sent for off-site disposal. The report shall include the following:

a) Quantity, chemical composition and identification of the European Waste Catalogue (EWC) code based on the proposals provided in response to the report required by Condition 2.8.26;

b) Details of the destination including details of environmental licence;

c) Details of treatment to be received.

7.2 Monitoring Requirements and Standards

7.2.1 The techniques used for the sampling and analysis of any substance listed in Table 7.2; the quality assurance of any automated measurement systems (AMS) referred in Table 7.2 and the reference methods used to calibrate an AMS shall follow the hierarchy of standards referred to in Section 1.2 of Part 6 of Annex VI of IED and as listed in SEPA Guidance or the latest version of Environment Agency Guidance Note M18.

7.2.2 Any AMS referred to in Table 7.2 shall be subject to control by means of parallel measurements with the reference methods referred to in Table 7.2 at least once per year.

7.2.3 The Operator shall record all maintenance and calibration work carried out on any AMS referred to in Table 7.2.

7.3 Data Handling and Reporting - Continuous Monitoring

7.3.1 The measured value of each concentration or parameter required to be continuously monitored by Condition 7.1.5 shall be electronically recorded as required by Table 7.2, as appropriate, and the time and date of each recorded measured value shall be recorded.

7.3.2 The recorded data set shall exclude measured values recorded during any zero, span and calibration checks on the instrument which gave rise to the values.

7.3.3 The Operator shall submit a quarterly report containing, as a minimum, the following:

a) Daily average reported value data sets measured and calculated in accordance with Conditions 7.3.1 and 7.3.2;

7.4 Data Handling and Reporting - Periodic Monitoring

7.4.1 Whenever periodic monitoring of any substance listed in Table 7.2 is being performed the Operator shall record, or cause or require to be recorded:

a) the time and date the sampling period commenced and terminated;

b) the identity of each person involved in performing the monitoring exercise, and their respective roles;

c) the volumetric flow-rate of the effluents being sampled and the measuring techniques employed;

d) any deviations from the methods specified in Table 7.2; and

7.4.2 The Operator shall report the results of all periodic monitoring. The report shall contain, as a minimum, the information specified in Condition 7.4.1.

7.5 Surface Water Control, Drainage and Surfacing

7.5.1 Drainage shall be provided and maintained to ensure that:

a) rainfall run-off does not drain into the waste storage areas;

b) surface water run-off contaminated with pollutants does not enter the Water Environment directly;

c) the Permitted Installation does not become subject to ponding or waterlogging; and

d) the contaminated rainwater, spillages or firefighting water from containing and extinguishing fires can be contained prior to any discharge to the Water Environment or sewer.

7.5.2 By 3 months prior to the Commencement of Commissioning the Operator shall prepare, record, report and implement a plan ("the Surface Water, Drainage and Spillage Plan"), designed to prevent the release of pollutants to surface water or site drains from any spillage or leaks resulting from the Permitted Activities.

7.5.3 As part of the Surface Water, Drainage and Spillage Plan required by Condition 7.5.2, the Operator shall identify what spillage prevention, mitigation and clean up equipment is to be made available on the Permitted Installation, the quantity of such equipment, and the strategic locations of any storage containing such equipment.

7.5.4 The Operator shall ensure that the equipment identified in compliance with Condition 7.5.3 is provided and maintained in good working order and is accessible at all times.

7.5.5 At least every 5 years, or after any changes to the system, the Operator shall review the Surface Water, Drainage and Spillage Plan required under Condition 7.5.2. Each review of the said plan and any changes shall be recorded.

7.5.6 Without prejudice to the requirements of Condition 2.2.2 the Operator shall maintain plans that identify the configuration, specification and the position of all drains, subsurface pipework, subsurface sumps and storage vessels that are used or have been used within the Site from the date of this Permit until the Permit is surrendered.

7.5.7 The Operator shall ensure that all surface water drainage systems, oil interceptor systems and SUDS, are operated, inspected and maintained so as to be fit for purpose.

7.5.8 All containers being used to store any liquids shall be located in a bund. The minimum capacity of any bund shall be at least 110% of the capacity of the largest container stored within it, or 25% of the total capacity of all containers within the bund, whichever is greater. In the event of any containers being connected to one another, they shall be treated as one container.

7.5.9 The bunded areas and containers shall meet equivalent technical standards to those set out in Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) or its subsequent replacement.

7.5.10 The Operator shall undertake and record annual inspections of all:

a) Drains, bunds and sumps;

b) Waste storage areas; and

c) Hardstanding and road surfaces, both internal and external

7.5.11 Any remedial actions identified during the inspections required by Condition 7.5.10 shall be undertaken and recorded.

7.6 Protection of Soil and Groundwater

7.6.1 Unless specified elsewhere in this permit there shall be no emission of any pollutants to groundwater or soil from the permitted installation.

7.6.2 The Operator shall maintain a record of any incident that has, or might have, impacted on the condition of any soil or groundwater under the permitted installation, either as a result of that incident or as a result of an accumulation of incidents, together with a record of any further investigation or remediation work carried out.

7.6.3 Notwithstanding the requirements of condition 2.2.2, the record required by Condition 7.6.2 shall be preserved until this permit is surrendered.

7.6.4 At least every 4 years, the operator shall carry out a systematic assessment of all measures used to prevent emissions from the permitted installation to soil and groundwater. A written report of each assessment shall be recorded and reported to SEPA. The report shall include details of and timescales for any additional measures that are required to prevent emissions to soil and groundwater

7.6.5 The Operator shall monitor the groundwater for the Relevant Hazardous Substances (RHS) specified in Table 7.3, at the frequency specified in Table 7.3, the purpose of which shall be to identify groundwater contamination associated with the activities specified in Table 7.3 by those Relevant Hazardous Substances. Each Assessment shall be recorded and reported to SEPA within one month of completion. The first assessment shall be completed 2 months prior to first introduction of chemicals, fuels or other raw materials or wastes as required by Condition 2.8.35. The assessment shall include interpretation of the results with reference to previous monitoring undertaken, (including the site and where applicable baseline reports) and operations at the Permitted Installation and details of corrective actions that are required to protect groundwater and remedy any contamination that has occurred as a result of permitted activities.

7.6.6 The operator shall monitor the soil at the site for the Relevant Hazardous Substances specified in Table 7.4 at the frequency specified in Table 7.4, the purpose of which shall be to identify soil contamination associated with the activities specified in Table 7.4 by those Relevant Hazardous Substances. Each assessment shall be recorded and reported to SEPA within one month of completion. The first assessment shall be completed 2 months prior to first introduction of chemicals, fuels or other raw materials or wastes as required by Condition 2.8.35. The assessment shall include interpretation of the results with reference to previous monitoring undertaken (including the site and where applicable baseline reports) and operations at the permitted installation and details of corrective actions that are required to protect soil and remedy any contamination that has occurred as a result of permitted activities.

7.6.7 The Operator shall submit a detailed soil and groundwater monitoring plan, for the monitoring required by conditions 7.6.5 and 7.6.6 to SEPA at least three months in advance of carrying out the monitoring, which shall include the locations at which monitoring shall be carried out and the frequency and methodology which shall be used.

7.6.8 The operator shall carry out the monitoring required by conditions 7.6.5 and 7.6.6 in accordance with the soil and groundwater monitoring plan required by condition 7.6.7.

7.6.9 The operator shall review the plan required by Condition 7.6.7 no later than 6 months after each monitoring event. The purpose of the review shall be to determine whether any changes to monitoring locations, frequency or parameters are required and where changes are proposed, submit a revised plan to SEPA.

7.6.10 Notwithstanding the requirements of Condition 2.2.2, all plans, monitoring and assessments reports undertaken in accordance with Conditions 7.6.4, 7.6.5, 7.6.6 and 7.6.8 shall be preserved until the permit is surrendered.

7.6.11 The operator shall maintain the groundwater monitoring wells detailed in the plan required in Condition 7.6.7 in a condition fit for purpose, unless otherwise agreed in writing with SEPA. Where a well's function is compromised it shall be repaired or replaced to allow sample collection in accordance with Conditions 7.6.5 and 7.6.6.

Table 7.1: Emissions to Water/Sewer ELVs

Required by Condition 7.1.4

Source of Emission	**Emission number point / Location on site plan**	W1	W2
	Emission source	SUDS Discharge	Wastewater Tank
	Destination	Cameron Burn	Tankered off-site for third party disposal/ treatment
	NGR	As detailed in the response to Permit Condition 2.8.30	As detailed in the response to Permit Condition 2.8.30
Monitoring Details	**Sampling location**	Sampling chamber on discharge line downstream of SUDS tank	Samples taken direct from tank
Limits For Parameters From Emission Source	**Basis of limit value**	Emission Limit Value (ELV) (mg/l)	Emission Limit Value (ELV) (mg/l)
	Emissions	To comply with General Binding Rules 10 & 11 as specified within The Water Environment (Controlled Activities) (Scotland) Regulations) 2011	-

Table 7.2: Emissions to Water Monitoring Requirements

Required by Condition 7.1.6

Emission Point	Parameter	Monitoring frequency	Monitoring device type	Monitoring standard or method
W1	pH	Weekly from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation and during First Year of Operation then as agreed in writing with SEPA.	Flow proportional composite sample over 24 hours	Latest standard from Environment Agency (EA) M18 document or as otherwise agreed in writing with SEPA.
W1	Temperature (°C)	Weekly from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation and during First Year of Operation then as agreed in writing with SEPA.	Flow proportional composite sample over 24 hours	Latest standard from Environment Agency (EA) M18 document or as otherwise agreed in writing with SEPA.
W1	Flow (m3 /day & l/s)	Continuous from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation	Flow meter	Latest standard from Environment Agency (EA) M18 document or as otherwise agreed in writing with SEPA.
W1	Conductivity (uS/cm)	Weekly from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation and during First Year of Operation then as agreed in writing with SEPA.	Flow proportional composite sample over 24 hours	Latest standard from Environment Agency (EA) M18 document or as otherwise agreed in writing with SEPA.

Emission Point	Parameter	Monitoring frequency	Monitoring device type	Monitoring standard or method
W1	Total suspended solids (mg/l)	Weekly from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation and during First Year of Operation then as agreed in writing with SEPA.	Flow proportional composite sample over 24 hours	Latest standard from Environment Agency (EA) M18 document or as otherwise agreed in writing with SEPA.
W1	Biochemical Oxygen Demand – 5 day test (BOD5) (mg/l)	Weekly from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation and during First Year of Operation then as agreed in writing with SEPA.	Flow proportional composite sample over 24 hours	Latest standard from Environment Agency (EA) M18 document or as otherwise agreed in writing with SEPA.
W1	Ammoniacal Nitrogen (mg/l)	Weekly from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation and during First Year of Operation then as agreed in writing with SEPA.	Flow proportional composite sample over 24 hours	Latest standard from Environment Agency (EA) M18 document or as otherwise agreed in writing with SEPA.
W1	Total Organic Carbon (mg/l)	Weekly from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation and during First Year of Operation then as agreed in writing with SEPA.	Flow proportional composite sample over 24 hours	Latest standard from Environment Agency (EA) M18 document or as otherwise agreed in writing with SEPA.
W1	Visible Oil (mg/l)	Weekly from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation and during First Year of Operation then as agreed in writing with SEPA.	Flow proportional composite sample over 24 hours	Visual check

Emission Point	Parameter	Monitoring frequency	Monitoring device type	Monitoring standard or method
W1	Hydrocarbons (mg/l)	Weekly from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation and during First Year of Operation then as agreed in writing with SEPA.	Flow proportional composite sample over 24 hours	Latest standard from Environment Agency (EA) M18 document or as otherwise agreed in writing with SEPA.
W1	Mercury and its compounds as Hg (mg/l)	Weekly from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation and during First Year of Operation then as agreed in writing with SEPA.	Flow proportional composite sample over 24 hours	Latest standard from Environment Agency (EA) M18 document or as otherwise agreed in writing with SEPA.
	Cadmium and its compounds as Cd (mg/l)			
	Thallium and its compounds as Tl (mg/l)			
	Arsenic and its compounds as As (mg/l)			
	Chromium and its compounds as Cr (mg/l)			
	Copper and its compounds as Cu (mg/l)			
	Iron and its compounds as Fe (mg/l)			
	Lead and its compounds as Pb (mg/l)			

Emission Point	Parameter	Monitoring frequency	Monitoring device type	Monitoring standard or method
	Manganese and its compounds as Mn (mg/l)			
	Nickel and its compounds as Ni (mg/l)			
	Zinc and its compounds as Zn (mg/l)			
W1	Dioxins and furans (ng/l I-TEF) and (WHO-TEF) (ng/l)	Monthly from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation and during first 6 months from First Operation and then as agreed in writing with SEPA	Flow proportional composite sample over 24 hours	Latest standard from Environment Agency (EA) M18 document or as otherwise agreed in writing with SEPA.
W1	Dioxin-like PCBs (WHO-TEF) (ng/l)	Monthly from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation and during first 6 months from First Operation and then as agreed in writing with SEPA	Flow proportional composite sample over 24 hours	Latest standard from Environment Agency (EA) M18 document or as otherwise agreed in writing with SEPA.
W1	Poly-cyclic aromatic hydrocarbons (ug/l)	Monthly from the date of the first introduction of chemicals, fuels or other raw materials or wastes at the Permitted Installation and during first 6 months from First Operation and then as agreed in writing with SEPA	Flow proportional composite sample over 24 hours	Latest standard from Environment Agency (EA) M18 document or as otherwise agreed in writing with SEPA.
W2	As required to complete the WM3 Assessment for effluent from W2 as agreed in writing with SEPA in response to Condition 2.8.27.			

Note: All analysis shall be undertaken on unfiltered samples.

Table 7.3 – Groundwater Monitoring Requirements

Relevant hazardous substance	Location and activity	Frequency
Ammonia	Tank storage area and area of direct feed into boiler system	At least once every 5 years
Chemical Oxygen Demand	Storage areas and water treatment plant area, waste bunker area and waste water pit area	At least once every 5 years
Calcium Hydroxide	Silos storage area and area of direct feed into the flue gas treatment system	At least once every 5 years
Sodium Hydroxide, Hydrochloric acid, Sulphuric acid	IBC storage area and water treatment plant area	At least once every 5 years
pH	Storage areas, water treatment plant area, waste bunker area and waste water pit area	At least once every 5 years
Total Petroleum Hydrocarbon Criteria Working Group (TPH CWG) aliphatic and aromatic split	Tank storage area and area of direct feed into boiler system	At least once every 5 years
Heavy metals, PAH USEPA 16	APCr silo area, IBA storage bunker area, waste bunker area and waste water pit area	At least once every 5 years

Table 7.4 – Soil Monitoring Requirements

Relevant hazardous substance	Location and activity	Frequency
Ammonia	Tank storage area and area of direct feed into boiler system	At least once every 10 years
Calcium Hydroxide	Silos storage area and area of direct feed into the flue gas treatment system	At least once every 10 years
Sodium Hydroxide, Hydrochloric acid, Sulphuric acid	IBC storage area and water treatment plant area	At least once every 10 years
pH	Storage areas, water treatment plant area, waste bunker area and waste water pit area	At least once every 10 years
TPH CWG aliphatic and aromatic split	Tank storage area and area of direct feed into boiler system	At least once every 10 years
Heavy metals, PAH USEPA 16	APCr silo area, IBA storage bunker area, waste bunker area and waste water pit area	At least once every 10 years

8 CONDITIONS APPLYING TO SOLID RESIDUES FROM THE INCINERATION PLANT

8.1 Management of Solid Residues Generated on the Permitted Installation

8.1.1 No later than 3 months prior to the Commencement of Commissioning the Operator shall prepare, implement, maintain and report a plan ("the Residue Management Plan") following a systematic assessment and review of the management of all residues generated by the Permitted Activities.

8.1.2 The Residue Management Plan shall be reviewed at least every 2 years. Each review shall be recorded and reported to SEPA.

8.1.3 The Residue Management Plan shall be written in accordance with BS EN 14899. See latest version of Environment Agency Technical Guidance (Monitoring) Note M4 Guidelines for Ash Sampling and Analysis for further guidance.

8.1.4 The Residue Management Plan required by Condition 8.1.1 shall define for each solid residue the following information:

a) the residue source, type and storage location, and quantities involved;

b) how the residue from the plant is prevented or reduced to a minimum, in amount and harmfulness;

c) where residues are produced how they are, in order of priority, prepared for reuse, recycled, recovered or, where that is technically and economically impossible, disposed of while avoiding or reducing any impact on the environment;

d) how the method and frequency of sampling and analysis is consistent with recognised European standards;

e) subject to Condition 2.8.28, the physical and chemical characteristics (including total soluble fraction and heavy metals soluble fraction), hazard category and polluting potential;

f) how each residue from differing sources is kept separate from other residues to provide compliance with Condition 8.1.8;

g) how each residue which is a dust, or has the potential to become a dust, shall be stored and handled in a manner designed to prevent dispersal into the environment.

h) as a minimum, the characterisation required by Condition 8.1.4 e) shall comprise:

i. the assessment of the concentration of the substances listed in Table 8.1 according to the requirements identified in Table 8.1; and

ii. an assessment of the extent and nature of substances which may leach from a sample of each residue taken no less frequently than once per year.

8.1.5 Compliance with Condition 5.1.1 a) shall be assessed by performing tests to ascertain the Total Organic Carbon (TOC) content or loss on ignition (LOI) of composite samples of dry slag or Incinerator Bottom Ash (IBA) at a frequency of not less than once every week during the first 3 months of operation, and at a frequency of not less than once every 3 months thereafter. The results of the tests shall be recorded and reported to SEPA

8.1.6 Compliance with Condition 8.1.4 b) shall be assessed by performing tests to ascertain the chemical composition of composite samples of the Air Pollution Control residues (APCr) at a frequency of not less than once every week during the first 3 months of operation, and at a frequency of not less than once every 3 months thereafter. The results of the tests shall be recorded and reported to SEPA.

8.1.7 The Operator shall also maintain a record of the dates, tonnages and destination of each consignment of residue removed from the Permitted Installation. The said record shall be updated daily.

8.1.8 Incinerator Bottom Ash/ slags shall not be mixed with APCr.

Table 8.1: Residue Assessment

Required by Condition 8.1.4

Substance	Residue stream	Monitoring frequency	Analytical method
Mercury	All residues	Quarterly where process has operated for a total aggregate period of 12 hours or more and at least monthly for the first three months of operation.	BS EN 14899/ latest version of EA Monitoring Technical guidance document M4 Guidance for ash sampling and analysis, or as otherwise agreed in writing with SEPA.
Cadmium			
Dioxins, dibenzofurans, dioxin-like polychlorinated biphenyls and poly-cyclic aromatic hydrocarbons			
All other soluble heavy metals	All residues		
Loss on ignition (LOI) Or Total organic carbon (TOC)	IBA and other boiler ash / slag	Quarterly where process has operated for a total aggregate period of 12 hours or more and LOI or TOC, at least weekly for the first three months of operation.	
Free lime	APCR		
Moisture	APCR		

9 CONDITIONS APPLYING TO ENVIRONMENTAL MONITORING BEYOND THE INSTALLATION BOUNDARY

9.1 Environmental Monitoring

9.1.1 At least 12 months prior to Commencement of Commissioning of the Incineration Plant, the Operator shall provide SEPA with proposals for an Environmental Monitoring Programme ("Environmental Monitoring Programme or "EMP") of the species listed in Table 9.1. The purpose of the EMP shall be to determine the baseline concentrations in soil and vegetation of those species and to undertake ambient monitoring of air quality prior to the commencement of Commissioning of the Incineration Plant and following subsequent operation.

9.1.2 Following receipt of written acceptance by SEPA of the programme required by Condition 9.1.1, the Operator shall implement the agreed EMP. The results shall be recorded and reported to SEPA.

Table 9.1: Environmental Monitoring

Required by Condition 9.1.1

Environmental measurement (concentration)	Location	Methodology	Prior to Commissioning	During first 2 years of operation	Subsequent years of operation
Dioxins and furans and dioxin-like PCBs in soil & vegetation	Locations to be agreed in writing with SEPA including location upwind of prevailing wind direction	Sampling according to BS ISO 10381:2002 or as otherwise agreed in writing with SEPA	At least 5 samples taken and analysed	At least 5 samples taken and analysed annually	To be agreed in writing with SEPA
Heavy metals by species in soil & vegetation for the following heavy metals: arsenic, cadmium, chromium and nickel and their compounds	Locations to be agreed in writing with SEPA including location upwind of prevailing wind direction	Sampling according to BS ISO 10381:2002 or as otherwise agreed in writing with SEPA	At least 5 samples taken and analysed	At least 5 samples taken and analysed annually	To be agreed in writing with SEPA

Environmental measurement (concentration)	Location	Methodology	Prior to Commissioning	During first 2 years of operation	Subsequent years of operation
The following substances in ambient air PM10 PM2.5 Arsenic and its compounds) Cadmium and its compounds Chromium and its compounds Nickel and its compounds	Locations to be agreed in writing with SEPA including location upwind of prevailing wind direction	Latest version of EA document M8 (Monitoring Ambient Air), or as otherwise agreed in writing with SEPA.	At least 5 samples taken and analysed	At least 5 samples taken and analysed annually	To be agreed in writing with SEPA

10 CONDITIONS APPLYING TO THE OPERATION OF THE STANDBY GENERATOR

10.1 Air Emission Conditions

10.1.1 The emissions to air specified in Table 10.1, shall only be permitted from the emission locations specified in that Table.

10.1.2 The Operator shall carry out periodic monitoring of the parameters specified in Table 10.2, at the sampling location specified in Table 10.1 and subject to the requirements for monitoring specified in Table 10.2.

10.1.3 Monitoring shall not include periods of start-up or shut down.

10.1.4 For any parameter specified in Table 10.1 all results of monitoring carried out under Condition 10.1.2 shall be corrected to the reference conditions 273K, 101.3kPa and 15% oxygen v/v, dry gas. The results of all tests and data used to correct the monitoring results to the reference condition specified in this Condition shall be recorded and reported.

10.1.5 The operator shall record the date, time, duration and results of all periodic monitoring carried out under condition 10.1.2 and report said results. For each result, the report shall include the operational rate of the medium combustion plant at the time of monitoring, any unusual or abnormal operating conditions which occurred during the sampling period, and any deviations from the methods specified in Table 10.2 and the associated confidence interval.

10.1.6 The Operator shall report to SEPA in writing the results of all periodic monitoring, in accordance with the requirements of BS EN ISO/IEC 17025 and CEN/TS 15675. Said report shall include all information specified in Condition 10.1.5.

10.1.7 All emission to air, from the emissions to air specified in Table 10.1 other than steam or water vapour, shall be colourless and free from persistent mist, fumes and droplets.

10.1.8 The operator shall record and report the mass emission results for the parameters of the combined emissions specified in Table 10.3 using the method agreed in writing with SEPA (as summarised in Table 10.3). This information shall be reported in a format agreed in writing with SEPA.

10.1.9 Information used to estimate mass emissions in compliance with condition 10.1.8 shall be recorded for each estimate.

10.2 Operation of Medium Combustion Plant

10.2.1 All reasonable steps must be taken to ensure periods of start-up and shut-down of the medium combustion plant are kept as short as possible.

10.2.2 No fuels other than gas oil may be combusted in the medium combustion plant.

10.2.3 The operator shall maintain a written record of the type and quantity of fuel used together with the total annual hours of operation for the medium combustion plant.

10.2.4 All written records required by Condition's 2.4.2 to 2.4.4 in relation to Condition 10.1.1, Condition's 10.1.4, 10.1.5, 10.1.6, 10.1.9, 10.1.10 and Condition 10.2.3 shall be retained for at least 6 years from the date when the record was made.

Annex 1 to Schedule 10 – Emissions to Air

Table 10.1: Emissions to Air ELVs

Source of Emission	**Emission point number/ Location on site plan**	A3
	Emission source	Standby Generator
	Stack height/ diameter (m)	As detailed in the response to Permit Condition 2.8.19 g)
	Location on Site Plan	A3
	NGR	As detailed in the response to Permit Condition 2.8.19 g)
Monitoring Details	**Type of Monitoring**	Periodic
	Sampling Location	Port in stack
Limits for Parameters from Emission Source	**Oxides of Nitrogen (as NO_2) mg/m^3**	None set
	Carbon Monoxide mg/m^3	None set

Table 10.2 - Emissions to Air Monitoring Requirements

Parameter	**Emission point number(s)**	**Periodic Monitoring**			
		Units	**Standard**	**Frequency**	**Operational Mode**
NO_x (as NO_2)	A3	mg/m^3	BS EN 14792	At the most frequent interval of after 1,500 hours of operation, or every 5 years	Generator operating under stable conditions at a representative even load
CO		mg/m^3	BS EN 15058		
O_2		%	BS EN 14789		
Moisture		%	BS EN 14790		
Flow		m^3/Hr	BS EN 16911-1		

Table 10.3 - Mass Emissions to Air

Parameter	**Combined Emissions (Number)**	**Method (Summary)**	**Mass Emissions Result to be recorded as**
NO_x	A3	As agreed in writing with SEPA	Tonnes per year
CO			

EXPLANATORY NOTES

(These Explanatory Notes do not form part of the Permit)

1. BAT

It should be noted that Regulation 22 of the Regulations specifies that it is a condition of a permit that the operator must use the best available techniques (BAT) for preventing or, where that is not practicable, reducing emissions from the installation. This is referred to as the 'general' BAT condition.

This does not apply to the extent that any other condition of the permit, or a standard rule which has effect as a standard rules condition, has the same effect.

Examples of aspects of the operation that have not been regulated by specific Conditions are general maintenance requirements.

BAT is defined in Regulation 4 of the Regulations as follows:

"Best available techniques" means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment as a whole;

"available techniques" means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the UK, as long as they are reasonably accessible to the operator;

"best" means in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole;

"techniques" includes both the technology used and the way in which an installation is designed, built, maintained, operated and decommissioned.

"BAT conclusions" means a document containing the parts of a BAT reference document laying down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures.

"emerging technique" means a novel technique for an industrial activity that, if commercially developed, could, when compared to existing best available techniques provide a higher level of protection of the environment, or at least the same level of protection of the environment and higher cost savings.

"emission levels associated with best available techniques" means the range of emission levels obtained under normal operating conditions using a best available technique, or combination of best available techniques, as described in BAT conclusions, expressed as an average over a given period of time, under specified reference conditions.

Schedule 3 of the Regulations specifies the matters to be taken into account in determining BAT.

In considering BAT, SEPA would expect the Operator to have regard to all relevant PPC sector or other technical guidance, including BAT Reference Documents published by the European Commission and UK technical guidance published by the Environment Agency.

2. GENERAL STATUTORY REQUIREMENTS

The permit does not detract from any other statutory requirements applicable to you in respect of the Permitted Installation, such as any need to obtain planning permission or building regulations approval or any responsibilities under legislation for health, safety and welfare in the workplace.

3. APPEALS

If you are aggrieved by any of the conditions of the permit, you should initially contact the local SEPA Office at the address or telephone number below. Further information on your right of appeal and the appeals procedure is contained Regulation 58 and Schedule 8 of the Regulations.

4. SUBSISTENCE CHARGES

An annual subsistence charge will be payable in respect of the permit in terms of the current Pollution Prevention and Control (Scotland) Charging Scheme or any relevant charging scheme made under Section 41 of the Environment Act 1995, copies of which are available from SEPA.

5. ADDRESS AND TELEPHONE NUMBERS

The contact address and telephone number for all information to be reported in terms of the permit is as follows: -

Type of communication	Address	Telephone or Email
Initial notification of Pollution incident	N/A	Tel: 0800 80 70 60 24 hour pollution hotline
Application for New Permit/ Variation/ Transfer or Surrender	SEPA Registry Angus Smith Building 6 Parklands Avenue Eurocentral Holytown North Lanarkshire ML1 4WQ	Tel: 01698 839000 Email: registry.angussmith@sepa.org.uk
For all other communications including change notifications, data returns, incident reports and general enquiries	SEPA local office as confirmed by Site Officer:	Tel: 03000 996699 Email: wasteandindustry@sepa.org.uk

6. REVIEW OF CONDITIONS

The conditions of the permit will be periodically reviewed by SEPA.

7. PROPOSED CHANGE IN OPERATION OF INSTALLATION

It is a requirement of Regulation 45 of the Regulations that, if you propose to make a change in the operation of the installation, you must notify SEPA at least 14 days before making the change. The requirement under Regulation 45 does not apply if you have already made an application to SEPA for the variation of the conditions of the permit containing a description of the proposed change.

N.B. the requirements of Regulation 45 are in addition to any obligations you may have under the permit itself to only operate the Permitted Installation in the manner set out in the permit and to notify SEPA of proposed changes to the Permitted Installation.

Regulation 46 and Schedule 7 of the Regulations provide details on applications for variation of the permit in respect of proposed changes and substantial changes in operation.

"Change in operation" and "substantial change in operation" are defined in Regulation 2 of the Regulations.

8. ENFORCEMENT & OFFENCES

If SEPA is of the opinion that you have contravened, or are contravening or are likely to contravene a Condition of the Permit, or an Incident or accident significantly affecting the environment has occurred as a result of the operation of the Installation it may serve an Enforcement Notice. Further details on Enforcement Notices are provided in Regulation 55 of the Regulations.

If SEPA is of the opinion that the operation of an installation poses an immediate danger to human health, threatens to create an immediate significant adverse effect upon the environment or involves a risk of serious pollution it must, in certain circumstances, serve a Suspension Notice on you. Further details on Suspension Notices are provided in Regulation 56 of the Regulations.

It is an offence to operate an installation covered by the Regulations without a permit or in breach of the conditions of the permit. It is an offence to fail to comply with the requirements of an Enforcement or Suspension Notice. It is an offence to intentionally make a false entry in any record required to be kept under a condition of a permit. Further details on offences and on penalties liable to be imposed upon conviction of an offence are provided in Regulation 67 of the Regulations.

Directors, managers and other individuals within a company may be held personally liable for offences under the Regulations.

All personnel who are responsible for fulfilling any condition of the permit should be made aware of these facts.

9. BREACH OF A PERMIT CONDITION

Regulation 52 of the Regulations specifies that the Operator of an Installation must immediately give notice to SEPA of any breach of a condition of the permit. It is an offence to fail, without reasonable excuse to comply with Regulation 52.

Any statement made by an operator to SEPA for the purposes of complying with regulation 52 may only be used in a prosecution for an offence where in giving evidence the operator makes a statement inconsistent with the initial notification.

All personnel who are responsible for fulfilling any Condition of the Permit should be made aware of these facts.

10. RECORDED SYSTEMS, PROCEDURES or Information Recording / Return Requirements

Where a condition requires any system, procedure or information record/return, the Operator may demonstrate compliance by making use of any relevant existing written system used for any other purpose and which meets the requirements of the relevant condition.

11. SYSTEMATIC ASSESSMENT (AND REVIEW)

Where a condition of the permit requires a "systematic assessment (and review)", the assessment should be undertaken in a methodical and arranged manner. If you require guidance on the scope or extent of any assessment (and review) required to be undertaken, you should contact your local SEPA office at the address or telephone number given above.

12. COMMERCIAL CONFIDENTIALITY

Regulation 64 of the Regulations requires that SEPA maintain a register ("a Public Register"), whilst Schedule 9 of the Regulations sets out what the Public Register shall contain. Regulation 66(2) provides you with an opportunity to apply for exclusion from the Public Register for certain confidential information. Where you are required to supply SEPA with information whether via a condition in this permit, or otherwise, and that information falls under Schedule 9, if you wish it to be excluded from the public register as confidential information, then such a submission must include an application made under Regulation 66(2).