

Notice: Grant of Permit

This permit has been granted by the Scottish Environment Protection Agency (SEPA) in exercise of its powers under Regulation 13 of the Pollution Prevention and Control (Scotland) Regulations 2012.

Permit number:

PPC/A/1197167

Operator:

DY Oldhall Energy Recovery Limited

12099664

6th Floor 33 Holborn, London, EC1N 2HT

Date of issue:

07/11/2025

Permitted activities:

The operation of an installation where the following activities are carried out: the Incineration of waste which is described in Part A of Section 5.1 paragraph (b) in Chapter 5 Waste Management 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”; and the burning of fuel in a Medium Combustion Plant that was put into operation after 20 December 2018 with a rated thermal input equal to or greater than 1 megawatt and up to and including 20 megawatts falling within Schedule 1, Part 1 Chapter 1, Section 1.1 Part B (d) of the Regulations and any directly associated activities, as further detailed in this permit.

Site location:

Oldhall Energy Recovery Facility (ERF), 16 – 20 Murdoch Place, Oldhall West Industrial Estate, Irvine, Ayrshire, KA11 5DG

Conditions applicable to this permit:

The conditions contained in the schedules of this permit. Terms used in this permit are, unless otherwise specified, defined in the Interpretation of Terms schedule.

CONTENTS**INTERPRETATION OF TERMS 3****SCHEDULES**

1	THE PERMITTED INSTALLATION	12
1.1	Description of Permitted Installation	12
1.2	Figure 1 - Site Plan	16
1.3	Figure 2 - Site Location	17
2	GENERAL MANAGEMENT CONDITIONS	18
2.1	Administration	18
2.2	Records	18
2.3	Reporting	19
2.4	Data Reporting	20
2.5	Incidents	20
2.6	Resource Utilisation	22
2.7	Heat and Power Conditions	24
2.8	Prior Commissioning Conditions	26
2.9	Commissioning Conditions	38
2.10	Start-up and Shut-down	41
2.11	De-commissioning	42
2.12	Technical Competence and Staffing	42
2.13	Financial Provision	43
3	CONDITIONS APPLYING TO THE PERMITTED INSTALLATION AS A WHOLE	64
3.1	Noise and Vibration	64
3.2	Odour Conditions	65
3.3	Weighbridge	69
3.4	Roads and Traffic Control	69
3.5	Litter, Dust and Vermin	69
3.6	Burning	70
3.7	Environmental Management and Maintenance	70
3.8	Sampling and Monitoring Facilities	70
4	CONDITIONS APPLYING TO WASTE RECEPTION, INSPECTION AND STORAGE	72
4.1	Permitted Types of Waste	72
4.2	Permitted Quantities of Waste	72
4.3	Waste Acceptance	73
4.4	Storage of Wastes for incineration	74
5	CONDITIONS APPLYING TO THE DESIGN, OPERATION AND MAINTENANCE OF THE INCINERATION PLANT	77
5.1	Process Design, Operation and Maintenance	77
5.2	Monitoring and Recording Requirements	78
5.3	Interlocks, Control Systems and Alarms	78

5.4	Abnormal Operation, Breakdowns and Other Than Normal Operating Conditions (OTNOC).....	80
6	CONDITIONS APPLYING TO EMISSIONS TO AIR FROM THE INCINERATION PLANT.....	83
6.1	Air Emission Conditions and Limits	83
6.2	Monitoring Requirements and Standards	85
6.3	Data Handling and Reporting - Continuous Emissions Monitoring	88
6.4	Data Handling and Reporting - Periodic Monitoring.....	91
6.5	Monitoring and Upgrade Programmes.....	93
7	CONDITIONS APPLYING TO EMISSIONS TO THE WATER ENVIRONMENT AND SOIL FROM THE INCINERATION PLANT.....	110
7.1	Water Emission Conditions and Limits	110
7.2	Monitoring Requirements and Standards	111
7.3	Data Handling and Reporting - Continuous Monitoring.....	111
7.4	Data Handling and Reporting - Periodic Monitoring.....	112
7.5	Surface Water Control, Drainage and Surfacing	112
7.6	Protection of Soil and Groundwater.....	115
8	CONDITIONS APPLYING TO SOLID RESIDUES FROM THE INCINERATION PLANT.....	122
8.1	Management of Solid Residues Generated on the Permitted Installation ...	122
9	CONDITIONS APPLYING TO ENVIRONMENTAL MONITORING BEYOND THE INSTALLATION BOUNDARY	130
9.1	Environmental Monitoring.....	130
10	CONDITIONS APPLYING TO SMALL COMBUSTION APPLIANCES SUBJECT TO MEDIUM COMBUSTION PLANT DIRECTIVE CONTROLS	132
10.1	Air Emission Conditions.....	132
10.2	Operation of Combustion Plant.....	133
10.3	Monitoring of Emissions	133

EXPLANATORY NOTES

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;

“Abnormal Operation”, for the purposes of Schedule 5 of this Permit, means any technically unavoidable stoppages, disturbances or failures of the plant or measurement devices which results in, or may result in, any ELV specified in Table 6.2 or Table 7.1 in this Permit being exceeded.

“AMS” for the purposes of Schedule 7 of this Permit, 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;

“APCr” means Air Pollution Control residue and consist of residues from the flue gas treatment process, including reaction products from the acid gas scrubbing reactor, Powdered Activated Carbon with adsorbed metals and organic compounds and residue from the bag filter;

“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;

“Boiler Ash” means ash collected from the boiler as described in Paragraph 1.1.4 d);

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

“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 a date as otherwise agreed 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 waste fuel at the Permitted Installation, this is known as “hot commissioning”;

"CHPQA" means the relevant Combined Heat and Power Quality Assurance methodology as published at <https://www.gov.uk/guidance/combined-heat-power-quality-assurance-programme>

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

“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;

“Diesel Engine” means an internal combustion engine which operates according to the diesel cycle and uses compression ignition to burn fuel;

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

“Engine” means a diesel engine;

“European Waste Catalogue” or “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 Acceptance of Waste" means the first date of receipt of waste for incineration for the purposes of carrying out the commissioning of the Incineration Plant;

"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;

"Fuel" for Medium Combustion Plant activities means and solid, liquid or gaseous combustible material:

"Gas Oil" means (a) any petroleum-derived liquid fuel falling within CN codes 2710 19 25, 2719 19 29, 2710 19 47, 2710 19 48, 2710 20 17 or 2710 20 19; or (b) Any petroleum-derived liquid fuel of which less than 65% by volume (including losses) distills at 250°C and of which at least 85% by volume (including losses) distills at 350°C by the ASTM D86 method;

"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 compliance with The Energy Recovery Efficiency Targets in Annex 1 of the TTWG and the BAT-AEELs in the Waste Incineration BAT Conclusions;

"IBA" means Incinerator Bottom Ash and consists of ash and solid residues collected from the bottom of the combustion grate system;

"IED Chapter IV" means Chapter IV "Special provisions for waste incineration plants and waste co-incineration plants" of the Industrial Emissions Directive (IED);

“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;

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

“Incineration” and “Incineration Plant” have the same meaning as in the Regulations;

“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;

“Medium Combustion Plant”, or “MCP”, has the same meaning as in the Regulations;

“Odour Extraction and Abatement System” or “OEAS” is the odour abatement system which extracts odorous air and treats it in an activated carbon bed;

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

“Operation” has the same meaning as in IED-PPC-TG4 - Pollution Prevention and Control (PPC) Technical Guidance: A Practical Guide for Part A Activities;

“Operating Hours” for a medium combustion plant means the time, expressed in hours, during which a medium combustion plant is operating and discharging emissions into the air, excluding start-up and shut-down periods:

“Other Than Normal Operating Conditions” or “OTNOC” means the scenarios considered to represent OTNOC for the Permitted Installation, as identified in the OTNOC Management Plan required by Condition 5.4.6 and comprise:

- a) abnormal operation; and
- b) start-up and shut-down periods;

“the Permitted Activities” are defined in Schedule 1 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 in the relevant CHPQA guidance method as published at <https://www.gov.uk/guidance/combined-heat-power-quality-assurance-programme>;

“rated thermal input” means the rate at which fuel can be burned at the maximum continuous rating of the appliance multiplied by the net calorific value of the fuel and expressed as megawatts thermal;

“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 and the WI BATCs;

“SEPA” means the Scottish Environment Protection Agency;

“separately collected waste” has the same meaning as in the Regulations;

“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;

“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;

“Significant Environmental Harm” for a medium combustion plant means: (a) harm to the health of human beings or living organisms; (b) harm to the quality of the environment, including: (i) harm to the quality of the environment taken as a whole; (ii) harm to the quality of air, water or land; or (iii) other impairment of, or interference with, ecosystems; (c) offense to the sense of human beings; (d) damage to property; or (e) impairment of or interference with, amenities or any legitimate uses of the environment;

“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; Shutdown begins after the last waste has been burned out following cessation of waste feed;

“Shut-down period” means the period of time taken to shut down the incinerator from completion of waste burn-out;

“Thermal Treatment of Waste Guidelines” or “TTWG” means the guidelines entitled “SEPA’s Thermal Treatment of Waste Guidelines 2014”, May 2014 published on SEPA’s website at www.sepa.org.uk;

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

“Waste Incineration BAT Conclusions” or “WI BATCs” 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;

“Waste incineration plant” has the same meaning as in Article 3(40) of the Industrial Emissions Directive;

“Waste incineration Installation” 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 wetland; and “surface water”, “groundwater” and “wetland” shall have the same meanings as in the Act;

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.

ACRONYMS

“APCr” means Air Pollution Control residue;

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

“BAT – AEEL” means Best Available Technique – Energy Efficiency Level;

“CO” means Carbon Monoxide;

“CEMS” means Continuous Emission Monitoring System;

“CEN” means Comité Européen de Normalisation (CEN);

“ELV” means Emission Limit Value;

“EMS” means Environmental Management System;

“HCl” means Hydrogen Chloride;

“HF” means Hydrogen Fluoride;

“IBA” means Incinerator Bottom Ash”;

“LOI” means Loss on Ignition;

“mAOD” means metres Above Ordnance Datum;

“mBGL” means metres Below Ground Level;

“MCP” means Medium Combustion Plant;

“NCV” means Net Calorific Value;

“NH₃” means Ammonia

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

“N₂O” means Nitrous Oxide;

“PAH” means Polycyclic Aromatic Hydrocarbons;

“PAC” means Powdered Activated Carbon;

“PBDDs” means Polybrominated dibenzodioxins;

“PBDFs” means Polybrominated dibenzofurans;

“PCDDs” means Polychlorinated dibenzo-*p*-dioxins;

“PCDFs” means Polychlorinated dibenzofurans;

“PM₁₀” means the mass of particulate matter contained in particles of less than 10 micrometres aerodynamic diameter.

“PM_{2.5}” means the mass of particulate matter contained in particles of less than 2.5 micrometres aerodynamic diameter.

“POPs” means Persistent Organic Pollutants;

“QAL” means Quality Assurance Level;

“SCR” means Selective Catalytic Reduction;

“SNCR” means Selective Non-Catalytic Reduction;

“SO₂” means Sulphur Dioxide;

“SUDS” means Sustainable Urban Drainage System;

“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 activity 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) in Chapter 5 Waste Management 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”; and
- b) the burning of fuel in a Medium Combustion Plant that was put into operation after 20 December 2018 with a rated thermal input equal to or greater than 1 megawatt and up to and including 20 megawatts falling within Schedule 1, Part 1 Chapter 1, Section 1.1 Part B (d) of the Regulations.

1.1.4 The Stationary Technical Unit comprises the following units:

- a) waste reception, inspection and storage area comprising a tipping hall with waste storage bunkers within an enclosed building fitted with fast acting roller shutter doors;

- b) a single line moving grate incinerator for the incineration of up to 185,600 tonnes per annum of non-hazardous residual waste fuel based on 8,000 hours operation at 23.2t/h at a fuel Net Calorific Value (NCV) of 10.5MJ/Kg up to a maximum of 27.0t/h at a fuel NCV of 9.0MJ/Kg;
- c) auxiliary natural gas fired low NO_x burner(s) to ensure the secondary combustion zone flue gas combustion temperature is maintained above 850°C;
- d) integral water tube heat recovery boilers to recover heat and generate superheated steam at approximately 62 barA and 425°C;
- e) a condensing steam turbine which is enabled for up to approximately 10.4 MW_{th} of heat export and capable of generating approximately 19.3 MW_e of electrical energy of which approximately 17.3 MW_e can be exported;
- f) An air pollution control system for cleaning and conditioning the flue gases prior to discharge comprising: equipment for the injection of urea solution into the combustion chamber for Selective Non-Catalytic Reduction (SNCR) of oxides of nitrogen; injection of lime and powdered activated carbon (PAC) into the combustion flue gases for abatement of acid gases including oxides of sulphur, oxides of nitrogen, dioxins, furans, other volatile organic compounds and heavy metals; and fabric filters for the removal of particulate matter including the residual lime and PAC. Treated flue gases are discharged to atmosphere via a 70m single flue stack;
- g) An enclosed Air Pollution Control residue (APCr) collection silo which discharges to a road tanker barrel for offsite treatment or disposal;
- h) Equipment for transporting, cooling and temporary storage of bottom ash, prior to transfer into road vehicles for transport off-site for recycling or disposal, all situated in a fully enclosed building;

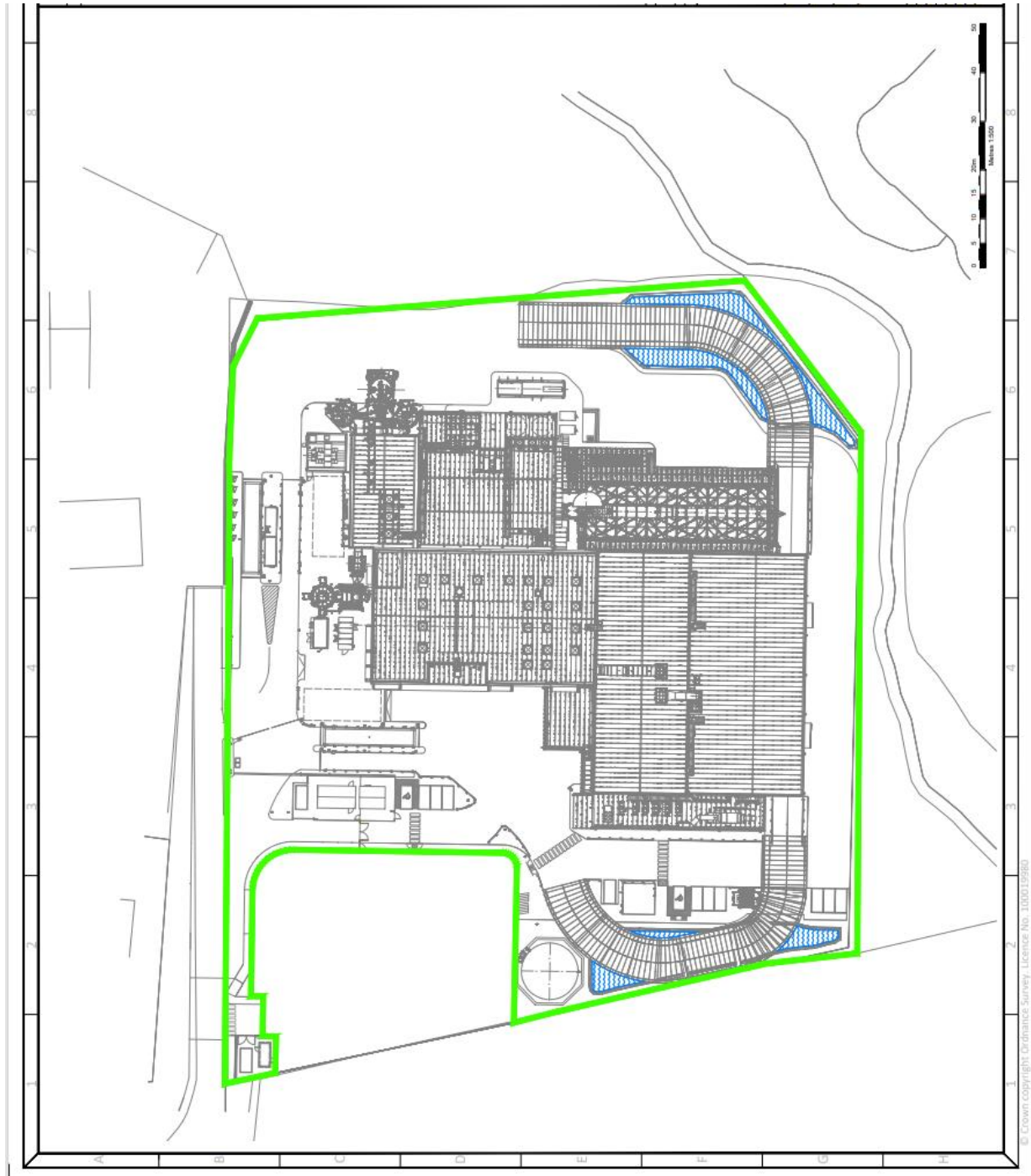
- i) A wastewater collection system for process effluents including boiler blow down, wastewater from cleaning and leachate from incinerator bottom ash;
- j) A standby odour abatement system known as the Odour Extraction and Abatement System (OEAS) based on the use of activated carbon for extraction and treatment of odorous air from the Waste Reception Area when the incineration plant is not operating;
- k) A gas-oil fired emergency electrical generator, with a thermal capacity of 3.8MW_{th} to provide emergency electrical power to the plant to allow a safe shutdown in the event of loss of onsite generation capability or the grid supply;
- l) Continuous emission monitoring systems (CEMS) for flue gas emissions via the main stack with associated data management and recording system;
- m) Site utilities and services not described elsewhere including process control systems, fans and compressed air systems to operate and control incineration processes and an air-cooled condenser to condense exhaust steam from the turbine.

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

- a) delivery and dispatch of raw materials, wastes and residues to and from the Site including Tanker offloading of ammonia and gas oil via a dedicated offloading area with drainage to a contained area which is segregated from the surface water drains;
- b) The export of electricity to the national grid and electricity and / or heat to other users;

- c) Surface water collection and treatment systems for discharge of surface water (other than low risk surface water) to sewer via a Class 1 bypass petrol interceptor and including a penstock isolation valve;
 - d) Surface water collection and treatment systems for discharge of low-risk surface water to the Dundonald Burn via a Sustainable Urban Drainage System including a penstock isolation valve;
 - e) Weighbridge systems.
- 1.1.6 The offices, stores, staff/ visitor car park, engineering/ maintenance workshops and foul sewage treatment plant are not part of the Permitted Installation.
- 1.1.7 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 its 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 held in compliance with a condition of this Permit shall be made in such a way as to retain the entry preceding the amendment for future reference. 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, retrievable, 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 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.

- 2.3.5 Any reference within this permit to reports or notifications to be made to SEPA in writing shall be read as to include by email, at the email addresses specified in the explanatory notes attached to this permit.

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 report required by Condition 2.4.1 shall be submitted to SEPA via email to waste.data@sepa.org.uk and to the address referred to in Condition 2.3.2.
- 2.4.3 The Operator shall complete an Annual Performance Report (“the Annual Performance Report”) on the waste incineration plant in the excel spreadsheet supplied by SEPA. Said report shall be completed by the 31 January each year (or other date agreed in writing by SEPA) for the previous calendar year.
- 2.4.4 The Annual Performance Report required under Condition 2.4.3 shall be submitted to SEPA via email, to the address referred to in Condition 2.3.2.

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 three months prior to the Commencement of 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 two 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 specified four year period, 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 fuel) 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.
- d) 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.
- e) SEPA reserve the right to periodically review progress of these opportunities and projects during inspections of the Permitted Installation undertaken throughout the four year assessment period.

2.6.3 The assessment shall be recorded using the “systematic assessment of resource use and efficiency template”, (IED-T-04 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.

2.6.4 Annual data 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 four year assessment cycle.

- 2.6.5 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.
- 2.7.2 The Operator shall maintain a Heat and Power Plan. Following Cessation of Commissioning the Heat and Power Plan shall 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 SEPA’s Thermal Treatment of Waste Guidelines (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 five 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 CHPQA Quality Index value of 93 or an indicative efficiency of 35%.

- 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 non-compliance, with reference to the provisions of the TTWG and the most recent version of the Heat and Power Plan. Such notification shall be provided to SEPA at least three 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, 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 of the Regulations.
- 2.7.7 The gross energy efficiency of the waste incineration plant shall be tested, at full load and according to EN standards during commissioning and after any modification that could significantly affect energy efficiency. Where the performance test cannot be carried out at full load for technical reasons, the gross energy efficiency can be determined taking into account the design values at performance test conditions. The results of any test shall be reported to SEPA within 3 months of being carried out with a justification where the test was not undertaken at full load.
- 2.7.8 No later than three months prior to carrying out a Performance Test required under Condition 2.7.7 during commissioning or following a significant modification, the Operator shall submit to SEPA a report outlining the proposed methodology to be used during the Performance Test to confirm

the gross energy efficiency of the incineration plant at full load consistent with the requirements under Condition 2.7.7.

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 2.8.27 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 one month following permit issue, the Operator shall provide SEPA with a plan of the implementation programme from Construction through to Commissioning (the “Construction and Commissioning Plan”). 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 four 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 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 three 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 or water 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 and water 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 and Table 6.2a in Schedule 6 of the Permit and with ELVs in Table 7.1 in Schedule 7 will be achieved in the shortest possible time.

2.8.5 No later than three 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.

2.8.6 At least three 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 2.8.6 a);
 - d) the optimum positional requirements for the locations of the temperature and oxygen monitoring of flue gases exiting the secondary combustion chamber;
 - e) the optimum positional requirements for the locations of the urea SNCR injection system under the different load conditions referred to in Condition 2.8.6 a); and
 - f) that the design includes sufficient monitoring ports to support subsequent validation of these requirements during Commissioning.
- 2.8.7 No later than three 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 2.8.6 will be demonstrated.

- 2.8.8 Without prejudice to Condition 2.8.12 and 2.8.13, at least four 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; Environment Agency Monitoring Stack Emissions: Measurement Locations and Monitoring Stack Emissions: Guidance for selecting a Monitoring Approach on www.gov.uk, 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 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 (k).
- 2.8.9 No later than four 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.
- 2.8.10 No later than four 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.

2.8.11 At least three 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;
- 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;
- c) Noise abatement techniques for externally located equipment, e.g. the air-cooled condensers and flue gas treatment plant fans;
- d) Techniques to prevent noise from vehicle reversing alarms. These should be compliant with SEPA's guidance at http://www.sepa.org.uk/air/process_industry_regulation/pollution_prevention_control/sepa_guidance.aspx;
- 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, how noise from the turbine to air cooled condenser steam bypass line is controlled, tonal noise from noisy items of equipment including compressors, the emergency electrical 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 emissions from the installation are consistent with BAT 37 of the Waste Incineration BATCs.

2.8.12 At least four 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/m³ 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/m³ as the 98th percentile of hourly averages beyond the Permitted Installation boundary;
- c) The type of abatement which will be required to achieve the requirements of Condition 2.8.12 b) and associated design details of said abatement system; and,
- d) Details of an appropriate ELV in OUE/m³ to set on the odour stack to achieve the odour threshold at the site boundary referred to in Condition 2.8.12 b). This should be supported by a dispersion modelling report and contour plots.

- 2.8.13 No later than three 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.
- 2.8.14 No later than three 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.
- 2.8.15 At least four 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 urea solution, gas oil and the associated offloading/loading areas. The purpose of the report shall be to describe how the design of the offloading areas, storages and associated bunding etc. will prevent emissions to the water environment or soil, 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.
- 2.8.16 At least three months prior to the First Acceptance 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.
- 2.8.17 Without prejudice to Condition 8.1.1, no later than three 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 it 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, WRc Report Reference UC 9390.05, published by the Environmental Services Association, January 2018, as amended.

2.8.18 No later than four 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 urea 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.

2.8.19 Steam Blowing activities during commissioning.

- a) At least four months prior to the commencement of steam blowing activities during commissioning of the boiler and STGS, 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 2.8.19 (a) is permitted unless agreed in writing with SEPA in advance of said alteration being carried out.

2.8.20 No later than three months prior to the first introduction of chemicals 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.
- c) The information recorded during the monitoring events proposed to determine groundwater levels should be reported in a table in mAOD and mBGL and in a drawing showing groundwater contours. A discussion should be provided on the inferred groundwater flow regime based on this information; the discussion information should confirm whether the groundwater monitored represents a groundwater body (superficial or bedrock).

2.8.21 No later than two months prior to the first introduction of chemicals or other raw materials or wastes, the Operator shall submit an updated site condition and baseline report which describes the condition of the site after completion of the final design of the Permitted Installation and any remediation required under Planning Conditions. Said report shall meet the requirements of SEPA Site and Baseline Report Guidance (IED TG02).

2.8.22 No later than two months prior to the first introduction of chemicals 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 2.8.20, the groundwater monitoring boreholes and trial pits referred to in Condition 2.8.20 shall be commissioned as agreed. In addition to the soil samples from trial pits referred to in Condition 2.8.23, soil and

groundwater samples shall also be collected from all of the said boreholes for subsequent analysis, as required by Condition 2.8.23.

- 2.8.23 Within one month of completion of the boreholes and trial pits required by Condition 2.8.22, 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.
- 2.8.24 No later than two months prior to the first introduction of chemicals 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.
- 2.8.25 No later than one month prior to the first acceptance of waste, incineration support fuel or bulk raw materials at the Permitted Installation, 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 and photographic evidence to confirm the following:
- a) that techniques for the control of noise emissions have been installed as described in the PPC Application and as described in the reports provided under Condition 2.8.11;
 - b) that techniques for the control of odour emissions have been installed as described in the PPC Application to provide compliance with Condition 3.2.1 and the Odour ELV prescribed in Table 6.2 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 2.8.18 e);

- d) that techniques for the control of emissions to the Water Environment as described in the reports provided under Condition 2.8.14, 2.8.15 and Condition 2.8.27, and required by Conditions 7.1.2, 7.5.1, 7.5.8, 7.5.9 and 7.6.1 have been implemented 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 waste bunkers, 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 2.8.17 to 2.8.22 inclusive.
- 2.8.26 No later than two months prior to Commencement of Commissioning, a copy of the Trade Effluent Consent for the discharge to combined sewer shall be submitted to SEPA.
- 2.8.27 At least four 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 “Monitoring discharges to water: environmental permitting” guidance documents published at www.gov.uk

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;
- c) details and justification of proposed sampling regime to obtain representative samples; and,
- d) details of monitoring location including grid reference and access.

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 minimum oxygen content, the secondary combustion zone temperature and the furnace residence time are consistent with the requirements of Condition 5.1.1(b), (c) and (d) respectively under the most unfavourable operating conditions anticipated in accordance with the methodology submitted under Condition 2.8.7 and the CFD model submitted under Condition 2.8.6;

- c) demonstrate the operation of the controls and interlocks installed to ensure compliance with Conditions 5.3.1 to 5.3.3 inclusive;
- d) demonstrate that the quality of the ash residues complies with the requirements of Table 8.1 and Condition 5.1.1(a) and to complete a hazardous properties assessment for IBA in line with the proposals provided in response to Condition 2.8.17 and agreed in writing with SEPA;
- e) confirm compliance with the ELVs specified in Table 6.2, Table 6.2a, and Table 7.1, and any Commissioning ELVs proposed under Condition 2.8.4 and agreed in writing with SEPA;
- f) demonstrate the 95% confidence levels of the CEMS comply with the criteria specified in paragraph 1.3 of Part 6, Annex VI of IED;
- g) demonstrate compliance with Quality Assurance Level (QAL) 1, 2 & 3 as specified in British Standard BS EN 14181 for continuous emissions monitoring systems (CEMS);
- h) demonstrate the gross energy efficiency in accordance with the methodology in Condition 2.7.8;
- i) demonstrate that the start-up equivalent energy recovery efficiency for generation of power, power and heat, heat only or a fuel, is at least 20% on a gross calorific value basis. The power efficiency shall be estimated and calculated in accordance with the examples given in Annex 4 in SEPA's Thermal Treatment of Waste Guidelines (TTWG);
- j) demonstrate compliance with the Odour ELV on the odour stack (Emission Point A2 in Table 6.1 of Schedule 6 of the Permit) and the requirement for the odour abatement system to operate when the incineration striking rate is below 85%. This shall be confirmed through a programme of monitoring at the inlet and outlet of the Odour Extraction

and Abatement System to confirm the abatement efficiency and the emitted odour concentrations at Emission Point A2 when the incinerator is not operational and when the incinerator striking rate is below 85%;

- k) demonstrate with evidence the time required to achieve full burn out of waste when the incinerator is shutting down; and,
- l) demonstrate the selected monitoring locations in Table 6.1 meet the stack flow criteria requirements and the homogeneity requirements specified in Sections 6.2 and 8.3 respectively of BS EN 15259.

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 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 2.8.3 b); and
- f) where appropriate, confirmation that the criteria detailed in the notification required by Condition 2.8.3 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 2.8.4 c) 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 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 condition 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 three months prior to Commissioning of the Installation or part thereof, and without prejudice to Condition 5.4.6, 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 shut-

down 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 two years 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 First Operation, 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 four 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 seven days of the conviction, whether or not the conviction is subsequently appealed.
- 2.12.6 The Operator shall notify SEPA in writing within seven 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 records 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 issue
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

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Waste Data Returns	2.4.1 2.4.2	Every 3 months 28 days after the end of each quarter	From First Acceptance of Waste	First date of 28 January, 28 April, 28 July or 28 October each year for previous calendar quarter from First Acceptance of Waste
Annual Performance Report	2.4.3 2.4.4	Annually by 31 January each year	As right	31 January following First Operation
Incident Notification	2.5.4	N/A	As right	Notification by telephone without delay to 0800 80 70 60
Incident initial report	2.5.5	N/A	As right	By next working day after identification of the Incident
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 & 2.5.8	2 years	As right	First submission 3 months prior to Commissioning
Resource utilisation systematic assessment and review and data recording	2.6.3 2.6.4	4 years	Review annually from First Operation	By 31 January every 4 years from date of First Operation
Heat and Power Plan	2.7.2	Annually by 31 January each year	As right	Annually by 31 January each year after Cessation of Commissioning

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
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
Report on Full Performance test undertaken during Commissioning or following significant modification	2.7.7	As required during Commissioning and following significant modification	As right	Within 3 months of completing test
Methodology for Full Performance test	2.7.8	As required during Commissioning and prior to significant modification	As right	3 months prior to test during commissioning or following significant modification
Construction and Commissioning Plan	2.8.2	Every 3 months until Commencement of Commissioning	As right	1 month following Permit issue and every 3 months thereafter until the Commencement of Commissioning.
Commissioning Plan	2.8.3	Single report	As right	4 months prior to Commencement of Commissioning
Report on proposals for Commissioning ELVs	2.8.4	Single report	As right	3 months prior to Commencement of Commissioning
Confirmation of completion of electrical export infrastructure	2.8.5	Single report	As right	3 months prior to Commencement of Commissioning
Final Computational Fluid Dynamics model	2.8.6	Single report	As right	3 months prior to Commencement of Commissioning

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Residence time validation methodology	2.8.7	Single report	As right	3 months prior to Commencement of Commissioning
CEMs final design	2.8.8	Single report	As right	4 months prior to Commencement of Commissioning
Mercury monitoring proposals during commissioning	2.8.9	Single report	As right	4 months prior to Commencement of Commissioning
Dioxin and furan monitoring proposals during commissioning	2.8.10	Single report	As right	4 months prior to Commencement of Commissioning
Noise controls	2.8.11	Single report	As right	3 months prior to Commencement of Commissioning
Odour control final design	2.8.12	Single report	As right	4 months prior to Commencement of Commissioning
Offsite environmental monitoring results	2.8.13	Single report	As right	3 months prior to Commencement of Commissioning
SUDS final design	2.8.14	Single report	As right	3 months prior to Commencement of Commissioning
Bulk storage final design	2.8.15	Single report	As right	4 months prior to Commencement of Commissioning
Waste acceptance procedures	2.8.16	Single report	As right	3 months prior to Commencement of Commissioning
Proposal for accelerated bottom ash testing	2.8.17	Single report	As right	3 months prior to Commencement of Commissioning

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Incineration plant final design	2.8.18	Single report	As right	4 months prior to Commencement of Commissioning
Steam blowing activity controls	2.8.19	Single report	As right	4 months prior to Commencement of Commissioning
Soil and groundwater monitoring plan	2.8.20	Single report	As right	3 months prior Commencement of Commissioning
Updated soil and groundwater site condition and baseline report	2.8.21	Single report	As right	2 months prior to Commencement of Commissioning
Borehole and trial pit construction report	2.8.23	Single report	As right	1 month after borehole installation complete
Relevant Hazardous Substances assessment	2.8.24	Single report	As right	2 months prior to Commencement of Commissioning
Confirmation that all design features are compliant	2.8.25	Single report	As right	1 month Prior to first acceptance of waste, incineration support fuel or bulk raw materials
Copies of the Trade Effluent Consent and authorisation to discharge to the local surface water network	2.8.26	Single report	As right	2 months prior to Commencement of Commissioning
Arrangements for monitoring discharges to water	2.8.27	Single report	As right	4 months prior to Commencement of Commissioning

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Commissioning progress report	2.9.3	Monthly during Commissioning until Cessation of Commissioning.	As right	Starting one month after Commencement of Commissioning and monthly thereafter and to be reported within 2 weeks of the end of each month
Notification that permit conditions cannot be complied with during Commissioning	2.9.4 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 & 2.10.2	2 years	3 months prior to Commissioning	N/A
Decommissioning Plan	2.11.1 & 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
Technically competent persons engaged in the operation or management of the installation	2.12.4	As required	As right	1 month prior to Commencement of Commissioning.
Conviction of a Relevant Offence	2.12.5	As required	As right	Notification within 7 days of conviction

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Notification of change in designated technically competent person(s)	2.12.6	As required	As right	Notification within 7 days of change
Notification of proposed change to financial provision	2.13.2	As required	As right	3 months prior to change
Systematic noise assessment and record of action taken	3.1.2	2 years or whenever there are equipment or other changes which could have an adverse impact on noise sensitive receptors	As right	Within 3 months of the Cessation of Commissioning and every 2 years thereafter
Noise and Vibration Management Plan	3.1.3 3.1.4	2 years or whenever there are equipment or other changes which could have an adverse impact on noise emissions	As right	3 months prior to Commencement of Commissioning
Odour Management Plan	3.2.2 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

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Olfactory surveys; the results of investigations and remedial action and the results of inspections and maintenance	3.2.4	As required	From first acceptance of waste at the Permitted Installation	N/A
Notification of unavailability of the Odour Extraction and Abatement System (OEAS)	3.2.8	As required	From first acceptance of waste at the Permitted Installation	Within 24 hours of the OEAS being unavailable when required for operation
Report on results of smoke test	3.2.9 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 OEAS	3.2.12 3.2.13	N/A	Prior to First Operation	N/A
Weighbridge records	3.3.2	Each load	From first acceptance of waste at the Permitted Installation	N/A
Pest control inspection and details of any subsequent treatment	3.5.2	Weekly and monthly inspections and as required for subsequent treatment	From first acceptance of waste at the Permitted Installation	N/A

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Record of operational management and maintenance system as required for compliance with Permit Conditions and BAT 1	3.7.1	Every 4 years	Within 6 months of First Operation.	N/A
Maintenance records	3.7.2	As required	From date of First Operation	N/A
Quantity of waste incinerated	4.2.3	Daily and Monthly	From first acceptance of waste	First date of 28 January, 28 April, 28 July or 28 October each year for previous calendar quarter from First Acceptance of Waste
Monitoring, recording and where practicable inspection of waste deliveries	4.3.1 4.3.2	Each delivery	From first acceptance of waste	N/A
Refusal to accept waste load	4.3.3	As required	As right	Within 14 days unless otherwise agreed in writing with SEPA
Quarantined waste	4.3.4	As required	From first acceptance of waste	First date of 31 January, 30 April, 31 July or 31 October following First Acceptance of Waste

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Off-site waste disposal	4.3.5	As required	From first acceptance of waste	First date of 31 January, 30 April, 31 July or 31 October following First Acceptance of Waste
Hygiene Plan	4.4.5	As required	At least one month prior to 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 during Commissioning	N/A
Oxygen and temperature monitoring records	5.2.2 5.2.3	Continuous	From first addition of waste during Commissioning	N/A
Non-utilisation of heat recovery system	5.2.5	Annually by 31 January for the previous year following First Operation	From date of First Operation	By 31 January for the previous calendar year and every 12 months thereafter as required by Condition 2.4.3/2.4.4
Recording and reporting of periods of abnormal operation	5.4.3	Quarterly and annual	From First Operation	First date of 31 January, 30 April, 31 July or 31 October following First Operation and annual summary as required under Condition 2.4.3/2.4.4.
Notification that maximum allowable hours of AO are exceeded	5.4.4	As required	From First Operation	Without delay

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
OTNOC Management Plan	5.4.6 5.4.7	2 years or whenever there is a change which could impact emissions	3 months prior to the Commencement of Commissioning and every 2 years thereafter	N/A
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	6.1.11	Annually	As right	31 January following First Operation
Information used to estimate mass emissions to air	6.1.12	Annually	As required by Condition 6.1.12	N/A
Public reporting of CEM data on internet	6.1.13	Continuous	As right	From First Operation following Cessation of Commissioning
Date and time of implementation of new CEMS calibration factors following QAL 2 Test or delay thereof	6.2.7	As required	As right	Within 10 working days of receipt of QAL 2 report by the Operator

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Results of AST & QAL2 Tests	6.2.8	AST - Annually QAL 2 Test – once every 5 years	As right	First QAL 2 Test within 6 months of the start of commissioning of the incineration plant, and first AST within 12 months of first QAL 2 Test To be reported within 6 weeks of completion
QAL 3 procedure and associated records	6.2.9	As required	One month prior to commissioning of the CEMS	N/A
Recording of QAL3 calibration data	6.2.10	As required	One month prior to commissioning of the CEMS	N/A
Monitoring equipment maintenance and calibration work and calibration inaccuracies or failure of AST or QAL 2	6.2.11	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 required if a period of AO has occurred during that day	6.3.1 6.3.9	Quarterly reporting within one month of the end of each quarter.	From first addition of waste during Commissioning	First date of 31 January, 30 April, 31 July or 31 October for the previous calendar quarter following First Operation

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Operational details during periodic monitoring	6.4.1	On each occasion of periodic monitoring	From first occasion of periodic monitoring	Reported with 6.4.7 on each periodic monitoring occasion
Outcome of actions and steps required under Condition 6.4.3 following a breach of the PCDD/F emission limit value or a mercury emission above $10\mu\text{g}/\text{Nm}^3$	6.4.4	As required	As right	Within 4 weeks of completion of the required accelerated sampling programme or as agreed in writing with SEPA.
Periodic monitoring of emissions to air	6.4.7	Quarterly for first 4 occasions then six monthly thereafter	From first report received	Sampling periods are calendar quarterly for first 4 occasions thereafter sampling periods are January to June and July to December each year. Reports due within 6 weeks of completion of sampling for each reporting period.
Programme of mercury monitoring to determine whether emissions are low & stable	6.5.1	Single report	As right	Within 6 months of First Operation
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

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Report on proposals for the frequency of monitoring of odour at Emission point A2 when the incinerator is shut down.	6.5.3	Single report	As right	Within 3 months of First Operation
Report on proposals for tests to determine the size distribution of PM10 and PM2.5 in particulate matter in emissions to air	6.5.4	Single report	As right	Within 6 months of First Operation
Updated air dispersion model & human health risk assessment metals based on actual emissions	6.5.5	Single report	As right	Within 15 months of First Operation
Report on performance and optimisation of abatement systems	6.5.6	Single report	As right	Within 4 months of First Operation
An assessment of SNCR system on the feasibility of complying with an ELV for NO _x of 100 mg/Nm ³ as a daily average.	6.5.7	Single report	As right	Within 12 months of First Operation

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Emissions to water sampling plan	7.1.5	Annually for forthcoming reporting period 1 January to 31 December	N/A	3 months prior to Commencement of Commissioning and then annually on 30 November for the next calendar year
Mass emissions to water	7.1.6	Annually for the calendar year	As right	31 January from Commencement of Commissioning
Information used to estimate mass emissions to water	7.1.7	Annually	As right	31 January from 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 first acceptance of waste during Commissioning	First date of 31 January, 30 April, 31 July or 31 October following first acceptance of waste during Commissioning
Reporting of continuous effluent monitoring data	7.3.3	Quarterly reporting within one month of the end of each quarter.	From first acceptance of waste during Commissioning	First date of 31 January, 30 April, 31 July or 31 October following first acceptance of waste during Commissioning
Periodic wastewater monitoring reports and Trade Effluent Consent and surface water discharge compliance summary	7.4.1 to 7.4.3	As detailed in Table 7.2	From the first acceptance of fuels, chemicals or other raw materials or wastes at site	First date of 31 January, 30 April, 31 July or 31 October following first acceptance of fuels, chemicals or other raw materials or wastes at site

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Surface Water, Drainage and Spillage Plan	7.5.2 / 7.5.5	4 years	3 months prior to the Commencement of Commissioning and every 4 years thereafter	N/A
Site Drainage Plans	7.5.6	As required	No later than one month prior to the first introduction of chemicals or other raw materials or wastes at the Permitted Installation and retained until Permit is surrendered	N/A
Annual inspections of impervious areas	7.5.11 / 7.5.12	Annually	12 months after Cessation of Commissioning	N/A
Soil and groundwater incidents	7.6.2 / 7.6.3	As required	From issue date of permit and retained until Permit is surrendered	N/A
Assessment of measures to prevent emissions to soil and groundwater	7.6.4	4 years	From issue date of permit	3 months prior to the Commencement of Commissioning, then after 3 years and every 4 years thereafter

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Groundwater monitoring	7.6.5	5 years for all boreholes, and annually for boreholes downfield of the fuel bunker drainage system	As right	All boreholes within 5 years of submission of the report required under Condition 2.8.24 and annually for boreholes downfield of the fuel bunker drainage system
Soil monitoring	7.6.6	10 years	As right	Within 10 years of report required under Condition 2.8.24
Detailed methodology for groundwater and soil monitoring	7.6.7 / 7.6.9	As required	From first set of monitoring prior to Commissioning	At least 2 months in advance of carrying out the monitoring and 6 months after each monitoring event
Record of all plans, monitoring and assessments in accordance with Conditions 7.6.4 - 7.6.9	7.6.10	As required	From issue date of Permit and retained until Permit is surrendered	N/A
Residue Management Plan	8.1.1 / 8.1.4	2 Years	From issue date of permit	3 months prior to the Commencement of Commissioning and every 2 years thereafter
Chemical & physical characterisation excluding soluble fraction / soluble metal fraction - All residues	8.1.3, 8.1.5 & Table 8.1	Quarterly reporting within one month of the end of each quarter.	From First Operation	First date of 31 January, 30 April, 31 July or 31 October for previous calendar quarter from First Operation

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Chemical & physical characterisation Soluble fraction & soluble metal fraction - All residues	8.1.3, 8.1.5 & Table 8.1	Annually for the calendar year	From First Operation	31 January for previous calendar year from First Operation
Core Hazardous Properties Assessment IBA and other boiler ash / slag residues	8.1.3, 8.1.5 & Table 8.1	Quarterly reporting within one month of the end of each quarter.	From First Operation	First date of 31 January, 30 April, 31 July or 31 October for previous calendar quarter from First Operation
Full Hazardous Properties Assessment IBA and other boiler ash / slag	8.1.3, 8.1.5 & Table 8.1	Annually for the calendar year	From First Operation	First date of 31 January following for previous calendar year from First Operation
TOC of bottom ashes/ slags	8.1.6 & Table 8.1	Weekly for first 3 months of operation then quarterly	N/A	31 January, 30 April, 31 July or 31 October for previous calendar quarter from First Operation
Residue dispatches	8.1.8	As right	Weekly from first incineration of waste	Quarterly reporting within one month of the end of each quarter as required under Condition 2.4.1/ 2.4.2
Environmental monitoring programme	9.1.1	As detailed in Table 9.1	As right	3 months prior to the Commencement of Commissioning

Authorisation Number: PPC/A/1197167

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Results of environmental monitoring and associated records	9.1.2 9.1.3	As detailed in Table 9.1	As right	First report as detailed in Prior Commissioning Condition 2.8.13. Subsequent reports within 2 months of completion
Periodic monitoring results and data used to correct reference data	10.1.3	As required	From the first fuel use at the Medium Combustion Plant	N/A
Periodic monitoring of emissions from the Medium Combustion Plant and reporting operational conditions during monitoring	10.1.5 10.1.6	N/A	First monitoring within 4 months from the grant of this permit or the first fuel use at the Medium Combustion Plant whichever is the latter and thereafter for Medium Combustion Plant operating less than 500 hours per year, every 1500 hours of operation or every 5 years	Within 6 weeks of monitoring
Medium Combustion Plant annual running hours	10.2.2	Annually	From first fuel use at the Medium Combustion Plant	First date of 31 January following first fuel use at the Medium Combustion Plant
Medium Combustion Plant Records	10.3.5	N/A	From first fuel use at the Medium Combustion Plant	N/A Records retained for minimum 6 years

Table 2.2: Raw Materials, Energy and Fuel

Required by Condition 2.6

Raw material, Energy or Fuel	Unit of Measurement
Water treatment chemicals for use in Boiler(s) speciated by chemical	litres
Urea in SNCR	Tonnes
Hydrated lime	Tonnes
Powdered activated carbon	Tonnes
Water (from mains)	m ³
Water (harvested)	m ³
Gas oil	m ³ and KWh
Natural gas	m ³ and KWh
Electricity (imported)	MWh
Electricity generated (parasitic loading)	MWh
Electricity generated (exported)	MWh
Total steam generated speciated by use e.g. low and intermediate pressure	MWh
Total steam generated (parasitic loading) speciated by use e.g. low and intermediate pressure	MWh
Total steam generated (exported) speciated by use e.g. low and intermediate pressure	MWh

3 Conditions Applying to the Permitted Installation as a Whole

3.1 Noise and Vibration

- 3.1.1 Noise and vibration from the Permitted Activities, as perceived by an Authorised Person must not be emitted at levels likely to cause significant pollution beyond the boundary of the Permitted Installation.
- 3.1.2 Subject to Condition 3.1.3, at least every two years, or whenever there is an equipment or other change which could have an adverse impact on noise sensitive receptors, 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.
- 3.1.3 No later than three 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 under Condition 2.8.11 set out the steps to be taken by the Operator to:
- a) prevent and reduce emissions of noise and vibration at all times; and
 - b) to ensure that Condition 3.1.1, Condition 3.1.2 and Conditions 3.1.4 to 3.1.7 inclusive are complied with; and,
 - c) identify the techniques to ensure that no significant noise and vibration pollution is caused.
- 3.1.4 At least every two 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 3.1.3. Each review of this plan and any revisions shall be recorded and the revised NVMP shall be reported to SEPA.

- 3.1.5 Noise emissions associated with the Permitted Activities shall not contain any Audible Tonal noise (assessed using narrow band analysis defined in Annex D of BS4142) at any noise sensitive receptor.
- 3.1.6 Without prejudice to Condition 3.1.1, within four 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 2.8.11. Where the acoustic survey indicates a significant variance from the sound levels predicted in the PPC Application, the Operator shall include a commentary on this aspect, and outline available modifications to rectify any noted exceedance, within the acoustic report.
- 3.1.7 The acoustic survey required by Condition 3.1.6 shall be carried out to meet the requirements of BS 4142:2014.

3.2 Odour 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 three months prior to the First Acceptance of Waste for Commissioning of the Installation or part thereof, the Operator shall prepare, implement, maintain and submit to SEPA an Odour Management Plan ("OMP"). The OMP shall set out the steps to be taken by the Operator to prevent and reduce emissions of odour at all times and to ensure that Conditions 3.2.3 to 3.2.13 inclusive are complied with.
- 3.2.3 The OMP shall be based on the SEPA Odour Guidance at www.sepa.org.uk and include but not be limited to:

- 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 and when the incineration striking rate is below 85%;
- d) a methodology for undertaking an olfactory survey of the Permitted Installation daily. The methodology should include:
 - (i) a site plan to identify locations for odour checks (e.g. Permitted Installation boundary, off-site etc);
 - (ii) consideration of wind direction to identify appropriate upwind and downwind locations;
 - (iii) other factors such as odour modelling to identify likely location of maximum impact;
 - (iv) the procedure for undertaking the odour check and for recording the results.
- 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.
- g) a monitoring plan for the odour abatement stack, emission point A2 in Table 6.1.

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 3.2.3 e); and
 - c) The details of operational checks, periodic inspection and planned maintenance required by Condition 3.2.12 and Condition 3.2.13.
- 3.2.5 At least every two 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 internal areas where potentially odorous waste is present shall be fitted with automatic fast acting doors which shall be kept shut at all times when a vehicle is not entering or exiting the building and only one vehicle access door into or out of the waste tipping hall shall be open at any one time.
- 3.2.7 The Odour Extraction and Abatement System (OEAS) shall be operational during any period of planned or unplanned shutdown of the incinerator and when the incineration striking rate is below 85% of design until such time as all waste has been removed from the site and there is no odour present in any internal area subject to the OEAS.
- 3.2.8 The Operator shall notify SEPA in writing within 24 hours of each occasion when the Odour Extraction and Abatement System is unavailable to abate odour when it is required to be operational. A record shall be kept of all periods in which the Odour Extraction and Abatement System is operational or unavailable.
- 3.2.9 The effectiveness of the Odour Extraction and Abatement System in capturing fugitive odours shall be assessed by smoke testing by a methodology and at a frequency to be agreed with SEPA in writing and the

outcomes from that assessment reported to SEPA. The methodology shall cover the following two situations:

- a) when the incinerator is online, and the primary air fan is extracting air from the tipping hall and waste bunker for combustion in the incineration process, or prior to first waste acceptance when the primary air fan is operational; and
- b) when the incinerator is off-line and the air from the tipping hall and waste bunker is being collected for treatment in the OEAS prior to discharge to atmosphere via Emission Point A2 in Schedule 6 of the Permit.

3.2.10 At least one month prior to the 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 and Abatement 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 whenever 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; and
- d) ensure the absorption capacity of the carbon bed is maintained.

3.3 Weighbridge

- 3.3.1 A calibrated weighbridge shall be provided at the Permitted Installation.
- 3.3.2 On arrival at and exit from site, all vehicles used for transporting waste 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 To prevent vehicles queuing on the public highway, waiting areas shall be maintained for vehicles delivering waste to, or removing waste from, the Permitted Installation.
- 3.4.2 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, dust or wind blown materials from the Permitted Installation. Any litter or wind blown materials 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 weekly by the Operator and monthly by a person suitably qualified and experienced in pest control 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 Burning

- 3.6.1 No waste shall be burnt within the Site Boundary except within the incineration plant as part of the Permitted Activities.

3.7 Environmental Management and Maintenance

- 3.7.1 Within six months of First Operation, The Operator shall define, record and implement such operational management, maintenance and other systems as are necessary for compliance with the Conditions of this Permit and BAT 1 of the Waste Incineration BAT Conclusions (WI BATCs) as described in paragraphs (i) to (xxviii) excluding (xxii) and (xxvi) of BAT 1. The systems shall be subject to documented review at intervals of not more than four years.
- 3.7.2 All plant, instrumentation and buildings used in carrying on the Permitted Activities shall be properly maintained, and the maintenance recorded.
- 3.7.3 The systems required by Condition 3.7.1 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 including noise are prevented or, where that is not practicable, minimised.

3.8 Sampling and Monitoring Facilities

- 3.8.1 Provisions for sampling, measurement and monitoring at the Permitted Installation shall meet the requirements of BS EN 15259 and Environment

Agency Guidance Note “Monitoring stack emissions: measurement locations” as published at www.gov.uk.

- 3.8.2 Permanent means of access including provision of lifting devices if required shall be provided 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 with 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 4.1 and Conditions 4.1.2 to 4.1.6 inclusive 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 non-ferrous 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 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 maximum quantity or storage duration or be stored outwith the locations

defined 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 185,600 tonnes in any calendar year, and shall not exceed 27.0 tonnes in any one hour.
- 4.2.3 The Operator shall record the daily and monthly total, and individual, quantities of each waste specified in Table 4.1 that is incinerated in the Permitted Installation.

4.3 Waste Acceptance

- 4.3.1 The Operator 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 for incineration

- 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 out-with the storage area.
- 4.4.2 No waste shall be transferred to the waste storage areas identified in Table 4.2 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 ("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 in all waste storage areas 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 shall be stored outside the designated waste storage areas identified in the Permit.

Table 4.1: Permitted Waste Types

Required by Condition 4.1.1

Wastes permitted to be incinerated		
EWC index number (6 figure code)	Description	Limitations
19 12 10	combustible waste (refuse derived fuel)	Waste must be pre-treated to recover recyclable materials
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	Waste must be pre-treated to recover recyclable materials

Table 4.2: Maximum Waste Storage Volume by Type

Required by Condition 4.2.1

Waste Type	Maximum Storage Capacity	Maximum Storage Duration	Storage Location
Incoming waste for incineration	2500 tonnes	2 Months	Waste Fuel Bunkers

Table 4.3: Waste Delivery RecordRequired 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 is less than 3% 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 zone;
- c) the temperature of the flue gases exiting the secondary combustion zone is maintained at not less than 850°C;
- d) the gas residence time in the secondary combustion zone 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 zone has reached 850°C.

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 of the combustion gas falls below the minimum temperature required by Condition 5.1.1 c) the auxiliary burner 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, 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 incinerator.
- 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 secondary combustion zone at the location in the report required by Condition 2.8.6 d); and,
 - b) the temperature of the flue gases exiting the secondary combustion zone at the location in the report required by Condition 2.8.6 d).
- 5.2.3 The measured value of each concentration or parameter required to be continuously monitored by Condition 5.2.2 a) and Condition 5.2.2 b) 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 Emission Limit Values (ELVs) applying to continuously monitored emissions specified in Table 6.2 and Table 6.2a.
- 5.2.5 A record shall be kept of all times when the incineration plant is operating and the power and/or heat recovery system is not utilised with the reason for the non-utilisation. The record shall be submitted annually in the report required under Condition 2.4.3.

5.3 Interlocks, Control Systems and Alarms

- 5.3.1 At least one of the auxiliary burners 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 zone 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 incinerator 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 ELV is being exceeded due to a disturbance or failure of the abatement system.

5.3.3 Controls and/or interlocks shall be provided, maintained and tested to ensure that, as soon as practicable, no waste can be fed to the incinerator 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 5.2.2 a) is not taking place;
- e) the temperature monitoring required by Condition 5.2.2 b) is not taking place;

- f) any of the continuous monitoring devices required by Condition 6.1.3 show that the corresponding ELV 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 may result in any ELV 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.

5.4 Abnormal Operation, Breakdowns and Other Than Normal Operating Conditions (OTNOC)

- 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 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.
- 5.4.3 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 Abnormal Operation began;
 - b) the cause of the period of Abnormal Operation;
 - c) justification of why the cause of the period of Abnormal Operation was unavoidable;

- d) the nature, timing and consequences of all work undertaken by the Operator for the purpose of bringing the period of Abnormal Operation to an end;
 - e) the time and date the period of Abnormal Operation was brought to an end, and whether this was achieved by shutting down the incinerator;
 - f) the results of emission monitoring in comparison with Table 6.2a during the period of Abnormal Operation;
 - g) whether the OTNOC Management Plan required by Condition 5.4.6 requires updating as a result of the period of Abnormal Operation; and,
 - h) the cumulative duration of Abnormal Operation for the calendar year relative to the maximum allowable hours specified in Condition 5.4.4.
- 5.4.4 The cumulative duration of Abnormal Operation shall not exceed 60 hours in any one year. Where the maximum allowable hours are exceeded SEPA shall be notified without delay.
- 5.4.5 In the event of a Breakdown or Abnormal Operation the ELVs for Emissions to Air in Table 6.2a in Schedule 6 shall apply.
- 5.4.6 No later than three months prior to the Commencement of Commissioning, the operator shall prepare, implement and maintain a risk-based OTNOC Management Plan (the “OTNOC” Management Plan”) setting out the steps to be taken by the Operator to reduce emissions to air and water during OTNOC. The OTNOC Management Plan shall include the following:
- a) a list of potential OTNOC scenarios, including failure of critical equipment and start up and shutdown periods when no waste is burned, their root causes and the potential consequences;
 - b) details of appropriate design of relevant systems/ critical equipment identified in Condition 5.4.6 (a);

- c) details of the preventative maintenance plan for the relevant systems/
critical equipment identified in Condition 5.4.6 (a);
- d) the proposed techniques to reduce the frequency, duration and
associated emissions to air, water and/ or soil from the occurrence of
OTNOC;
- e) a plan for monitoring and recording of emissions caused by OTNOC and
associated circumstances to meet the requirements of BAT 5 in the WI
BATCs;
- f) periodic assessment of the overall emissions during OTNOC in terms of
frequency of events, duration, amount of pollutants emitted and
implementation of corrective actions; and
- g) details of how the OTNOC Management Plan is integrated into the EMS
for the Permitted Installation.

5.4.7 At least every two 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 5.4.6. Each review of this plan and any revisions shall be recorded.

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 and Table 6.2a, 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 6.1.10.
- 6.1.2 Any percentage-based ELV specified in Table 6.2 or Table 6.2a shall be based on the averaging period and time span specified in Table 6.2 and Table 6.2a, where the percentage is the percentage of averaging periods within the time span that must not exceed the percentage-based ELV. Compliance with the ELVs specified in Table 6.2 and Table 6.2a shall be assessed as described in Conditions 6.3.1 to 6.3.9 and Conditions 6.4.1 to 6.4.7.
- 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 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, Table 6.2a and Table 6.3.
- 6.1.4 For any parameter specified in Table 6.2 or Table 6.2a, other than smoke and odour, all results of monitoring carried out under Condition 6.1.3 shall be corrected to the reference conditions 273.15 K, 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, 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 6.3.9, shall exceed the daily average ELV for that parameter in Table 6.2.

6.1.7 Subject to Condition 5.4.5, 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 100th percentile ELV stipulated in Table 6.2; or
- b) Over the calendar year, 97% of the half hourly average reported values shall not exceed the relevant 97th percentile ELV stipulated in Table 6.2.

6.1.8 Subject to Condition 5.4.5, 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 100th percentile ELV stipulated in Table 6.2; or
- b) 95% of the 10 minute average reported values shall not exceed the relevant ELV stipulated in Table 6.2.

6.1.9 Subject to Condition 5.4.5, 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 6.4.1 to 6.4.7, shall not exceed the relevant ELV stipulated in Table 6.2.

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

6.1.11 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 follow 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.

6.1.12 Information used to estimate mass emissions in compliance with Condition 6.1.11 shall be recorded.

6.1.13 From the date of First Operation, continuous emissions monitoring data shall be made publicly 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 ELV 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 ELV, or as otherwise agreed in writing with SEPA.

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

- a) be calibrated at least every 5 years by parallel measurements in compliance with the QAL 2 requirements of BS EN 14181; 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 every 12 months, 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 Where new calibration factors are established for any parameter during a QAL 2 test, the relevant CEMS shall be updated with those new calibration factors as soon as the QAL 2 Test report has been received and accepted by the Operator, and without unreasonable delay. The Operator shall record and report to SEPA the date and time of implementation of any new calibration factor to the CEMS, or where this has been delayed the reason for this, within 10 working days of receipt of the QAL 2 report by the Operator.
- 6.2.8 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.
- 6.2.9 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 outwith control chart tolerance limits as specified in BS EN 15267-3, and whether this is caused by a random or systematic error.
- 6.2.10 Data from the zero and span checks referred to in Condition 6.2.9 a) shall be maintained by the Operator. Should the control chart tolerance limits referred to in Condition 6.2.9 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.
- 6.2.11 The Operator shall record all maintenance and calibration work carried out on any CEMS required by Conditions 6.2.4 to 6.2.10. If any calibration work identifies 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, and/or a failure of the QAL2 or AST, this fact shall be notified to SEPA by first class post or email by the next working day after the identification.
- 6.2.12 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 unless otherwise agreed in writing with SEPA.
- 6.2.13 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.

6.2.14 Monitoring personnel, equipment and organisations shall have a quality system accredited to BS EN ISO/IEC 17025 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; and
- 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, 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;
 - 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; and
 - c) be based on the most recent calibration functions following a QAL 2 calibration exercise as required under Condition 6.2.8.
- 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 30 minute 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 30 minute and 10 minute average values recorded during periods of Abnormal Operation 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 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 ELV 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 or line was operated during each week covered by the report
- g) graphical representations of the hourly throughput (t/h) and the calculated fuel net calorific value (MJ/kg) as estimated by the control system.

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 during the sampling period (tonnes per hour);
- b) any OTNOC that occurred during the sampling period;
- c) details of all corrected continuous monitoring reported values for each day of sampling;
- d) for extractive testing, the mass of that substance collected during the said sampling period;
- e) for extractive testing, 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, MJ/Kg) of the waste being burned during the sampling period.

- 6.4.2 Dioxins & Furans (PCDD/Fs and PBDD/Fs) and Dioxin-like PCB's shall be reported as multiplied by the Toxic Equivalence Factors as specified in Table 6.5.
- 6.4.3 Without prejudice to Condition 2.5.1 to 2.5.6, in the event of the breach of the ELV for PCDD/Fs in Table 6.2 or an emission above 10 µg/Nm³ mercury, the Operator shall:
- a) have regard to the relevant actions in the Environment Agency PCDD-F Protocol and the Environment Agency Mercury CEMS Protocol;
 - b) in relation to PCDD-F or mercury, where the ELV is exceeded, identify and implement such steps as are necessary to prevent further possible incidents as required under Condition's 2.5.1 c) and 2.5.6; and,
 - c) determine whether long-term sampling or CEMS are required for PCDD/Fs and mercury respectively.
- 6.4.4 The Operator shall record and report to SEPA the outcome of the actions and steps taken under Condition 6.4.3.
- 6.4.5 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.
- 6.4.6 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).
- 6.4.7 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. Said report shall include:
- a) the information specified in Condition 6.4.1;

- b) an assessment comparing the results from periodic monitoring with the CEMs monitoring results for the same period which considers the differences between the results, defines any consequent actions to be taken to investigate the cause of those differences and includes the proposed date(s) for submission of the results of the investigation; and
- c) the submission required by Condition 6.4.7 b) shall include an assessment of the longer-term trend of differences recorded in periodic monitoring exercises.

6.5 Monitoring and Upgrade Programmes

- 6.5.1 Within six 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 SEPA.
- 6.5.2 Within six months of First Operation, the Operator shall carry out a programme of PCDD/Fs, and dioxin-like PCB monitoring, and submit a report to SEPA with an analysis of whether PCDD/Fs emissions can be considered to be stable and whether the emissions of dioxin-like PCBs are proven to be less than 0.01 ng WHO-TEQ/Nm³. 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 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 and method of monitoring of odour at Emission Point A2 for occasions when the incinerator is shut down. The purpose of the monitoring shall be to check compliance with the ELV at Emission Point A2 and to check the efficiency of the abatement system.

- 6.5.4 Within six 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 from emission point A1 which identify the fractions in the PM₁₀ and PM_{2.5} ranges. The report shall specify the design of the ports for PM₁₀ and PM_{2.5} sampling. The report shall detail a timetable for undertaking said tests and producing a report of the results.
- 6.5.5 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 NO₂, SO₂, PM₁₀ 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.
- 6.5.6 Within four months of First Operation, the Operator shall submit to SEPA a written report describing the performance and optimisation of:
- a) The lime injection system for minimisation of acid gas emissions;
 - b) The carbon injection system for minimisation of dioxin and heavy metal emissions; and,
 - c) The Selective Non-Catalytic Reduction (SNCR) system and combustion settings to minimise oxides of nitrogen (NO_x). The report shall include an initial assessment of the level of NO_x, nitrous oxide (N₂O) and ammonia (NH₃) emissions that can be achieved under optimum operating conditions.
- 6.5.7 Within 12 months of First Operation, the Operator shall carry out a further assessment of the performance of the SNCR system and submit a written

report to SEPA on the feasibility of complying with an ELV for NO_x of 100 mg/Nm³ as a daily average, including a description of any relevant cross-media effects identified during trial operation at this emission level. If an ELV for NO_x of 100 mg/Nm³ as a daily average is determined not to be feasible, the report shall propose an alternative ELV which would provide an equivalent level of NO_x reduction on a long-term basis such as an annual mass emission limit or percentile-based ELV.

Table 6.1: Emission Points Details

Required by Condition 6.1.1

Emission point ref. / location on site plan	A1	A2
Emission Source	Incineration discharge point	Odour abatement system discharge point
Stack Height (m)	70	43
Diameter (m)	1.84	1.25
NGR	NS 33722 36607	NS 33688 36534

Table 6.2: Emissions to Air ELVs applicable to Normal Operating Conditions and Monitoring Requirements Note 6Required by Condition 6.1.1

Emission Point	Parameter	Emission Limit Value (including unit)	Reference period	Monitoring frequency Note 4	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
		30 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement – Quarterly for first year then once every 6 months	BS EN 13284
A1	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	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
		400 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then once every 6 months	BS EN 14792

Emission Point	Parameter	Emission Limit Value (including unit)	Reference period	Monitoring frequency Note 4	Monitoring standard or method
A1	Sulphur dioxide	30 mg/ Nm ³	Daily average	Continuous measurement	BS EN 14181 BS EN 15267-3
	Sulphur dioxide (continued)	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
		200 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then once every 6 months	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
		Either a) 100 mg/ Nm ³ ; or, b) 150 mg/ Nm ³ applies. Note 3	Either a) 100% ½ hour average or b) 95% 10-minute average over 24 hours applies.	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 once every 6 months	BS EN 15058

Emission Point	Parameter	Emission Limit Value (including unit)	Reference period	Monitoring frequency Note 4	Monitoring standard or method
A1	Gaseous and vaporious organic substances expressed as Total Organic Carbon (TOC)	10 mg/ Nm ³	Daily average	Continuous measurement	BS EN 14181 BS EN 15267-3
		20 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
		20 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then once every 6 months	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
		60 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement - Quarterly for first year then once every 6 months	BS EN 1911

Emission Point	Parameter	Emission Limit Value (including unit)	Reference period	Monitoring frequency Note 4	Monitoring standard or method
A1	Hydrogen fluoride	1 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each.	Periodic measurement - Quarterly for first year then once every 6 months.	CEN TS 17340 (periodic)
A1	Ammonia	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 once every 6 months	BS EN ISO 21877
A1	Nitrous oxide	None set	Daily average	Continuous measurement Note 5	BS EN 14181 BS EN 15267-3
A1	Carbon dioxide	None set	Daily average	Continuous measurement Note 6	BS EN 14181 BS EN 15267-3
A1	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 once every 6 months	BS EN 14385 Note 1
A1	Mercury and its compounds	0.02 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement – Accelerated testing according to the protocol then quarterly for First Year of Operation then once every 6 months	BS EN 13211 (periodic) Note 1

Emission Point	Parameter	Emission Limit Value (including unit)	Reference period	Monitoring frequency Note 4	Monitoring standard or method
A1	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 once every 6 months	BS EN 14385 Note 1
A1	Polychlorinated dibenzo-p- dioxins and furans (PCDD/F) (I-TEQ)	0.04 ng I-TEQ/Nm ³	Average value over single measurement of 6 to 8 hours.	Periodic Measurement – Accelerated testing according to the protocol then quarterly for First Year of Operation then once every 6 months	EN 1948-1, EN 1948- 2, EN 1948-3 (periodic)
A1	PCDD/F (WHO- TEQ Humans / Mammals, Fish, Birds)	None set			
A1	Dioxin-like PCBs (WHO-TEQ Humans / Mammals, Fish, Birds)	None set	Average value over single measurement of 6 to 8 hours.	Periodic Measurement - Quarterly for first year then once every 6 months	EN 1948-1, EN 1948- 2, EN 1948-4 (periodic)
A1	Polybrominated dibenzodioxins and furans (PBDD/F)	None set	Average value over single measurement of 6 to 8 hours.	Periodic Measurement - Quarterly for first year of Operation then once every 6 months.	BS EN 1948 Parts 1, 2 and 3 for periodic sampling and Environment Agency Method Implementation Document (MID) for BS EN 1948: Parts 1-3: 2006

Emission Point	Parameter	Emission Limit Value (including unit)	Reference period	Monitoring frequency Note 4	Monitoring standard or method
A1	Specific individual poly-cyclic aromatic hydrocarbons (PAHs)	None set	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement Quarterly for first year then once every 6 months	BS ISO 11338-1 and BS-ISO 11338-2. Note 2
A1	Smoke	No. 1 (normal operation) No. 2 (start-up)	Every minute over a half hour period or until the smoke is no longer visible, i.e. scale 0 on the smoke chart for 5 readings, whichever is sooner.	As required following complaint of visible or smoky plume or as agreed in writing with SEPA	Visual assessment to BS 2742:2009 (as amended)
A2	Odour	900 OU _e /m ³	Average over 3 consecutive measurements	As required by Condition 2.8.12 b) and subsequently when the incinerator is shut down 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. 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, cyclopenta (c,d)pyrene, dibenzo[ah]anthracene, dibenzo(ai)pyrene, fluoranthene, indeno(1,2,3-cd)pyrene and naphthalene.

3. CO Short-term average ELV. Only 30 minute ELV as a 100th percentile or 10 minute ELV as a 95th percentile over 24 hours applies (Ref. IED Annex VI Part 8 para 1.1 d)(i)).
4. For periodic monitoring, the monitoring frequency does not apply where plant operation would be for the sole purpose of performing an emission measurement (Ref. Footnote 2 to BAT 4 in WI BATCs).
5. CEMS for nitrous oxide monitoring. No ELV will be set, however, for the purposes of calibration of the CEMS, a virtual ELV of 20mg/m³ and confidence interval 20% should be used.
6. CEMS for carbon dioxide monitoring. No ELV will be set, however, for the purposes of calibration of the CEMS, a virtual ELV of 10% and confidence interval 10% should be used.

Table 6.2a: Emissions to Air ELVs applicable to Abnormal Operation ^{Note 1} (Condition 5.4.5 requirements) and Monitoring Requirements

Emission Point	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1	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 6.3: Process Monitoring Requirements

Required by Condition 6.1.3

Location or description of point of measurement	Parameter	Units	Monitoring frequency	Monitoring standard or method	Other specifications
A1	Temperature in secondary combustion zone exit	°C	Continuous	Traceable to national standards	As agreed in writing with SEPA
A1	Exhaust gas temperature	°C and K	Continuous	BS 16911-2	As agreed in writing with SEPA
			Periodic Measurement - Quarterly for first year then once every 6 months	BS EN 16911-1	
A1	Exhaust gas pressure	kPa	Continuous	BS 16911-2	As agreed in writing with SEPA
			Periodic Measurement - Quarterly for first year then once every 6 months	BS EN 16911-1	
A1	Exhaust gas oxygen content	% dry gas	Continuous	BS EN 14181 BS EN 15267-3	
			Periodic Measurement - Quarterly for first year then once every 6 months	BS EN 14789	

Required by Condition 6.1.3 cont/d

Location or description of point of measurement	Parameter	Units	Monitoring frequency	Monitoring standard or method	Other specifications
A1	Exhaust gas water vapour content	%	Continuous	BS EN 14181 BS EN 15267-3	Unless gas is dried before analysis of emissions.
			Periodic Measurement - Quarterly for first year then once every 6 months	BS EN 14790	
A1	Volumetric flow	m ³ /hour & m ³ /s (Normalised & Actual)	Continuous	BS 16911-2	As agreed in writing with SEPA
			Periodic Measurement - Quarterly for first year then once every 6 months	BS EN 16911-1	As agreed in writing with SEPA
A2	Volumetric flow	m ³ /hour & m ³ /s (Normalised & Actual)	When monitoring required by Table 6.2 is undertaken	BS EN 16911-1	As agreed in writing with SEPA

Table 6.4: Exceptions to Condition 6.3.7Required by conditions 6.3.5, 6.3.6, 6.3.7 & 6.3.8

Time Average Basis	Invalidation Threshold
Annual Average	Less than 500 hours per year.
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
60 minute average	Invalid average= A 60 minute average based on less than 80 data points (or 40 minutes of relevant data captured at acquisition rates of less than once every 30 seconds)
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 chlorinated dioxins and furans				
Congener	I-TEF	WHO-TEF 1998		WHO-TEF 2005
	1990			
	Not specified	Fish	Birds	Humans / Mammals
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	0.5	0.05	0.1
1,2,3,6,7,8-HxCDD	0.1	0.01	0.01	0.1
1,2,3,7,8,9-HxCDD	0.1	0.01	0.1	0.1
1,2,3,4,6,7,8-HpCDD	0.01	0.001	<0.001	0.01
OCDD	0.001	<0.0001	0.0001	0.0003
Furans				
2,3,7,8-TCDF	0.1	0.05	1	0.1
2,3,4,7,8-PeCDF	0.5	0.5	1	0.3
1,2,3,7,8-PeCDF	0.05	0.05	0.1	0.03
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,7,8,9-HxCDF	0.1	0.1	0.1	0.1
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	<0.0001	0.0001	0.0003
Congener	WHO-TEF 1998			WHO-TEF 2005
	Fish	Birds		
Non-ortho PCBs				
3,3',4,4'-TCB (PCB 77)	0.0001	0.05		0.0001
3,4,4',5-TCB (PCB 81)	0.0005	0.1		0.0003
3,3',4,4',5 - PeCB (PCB 126)	0.005	0.1		0.1

TEF Schemes for chlorinated dioxins and furans			
3,3',4,4',5,5'-HxCB (PCB 169)	0.00005	0.001	0.03
Mono-ortho PCBs			
2,3,3',4,4'-PeCB (105)	<0.000005	0.0001	0.00003
2,3,4,4',5-PeCB (114)	<0.000005	0.0001	0.00003
2,3',4,4',5-PeCB (118)	<0.000005	0.00001	0.00003
2,3',4,4',5-PeCB (123)	<0.000005	0.00001	0.00003
2,3,3',4,4',5-HxCB (156)	<0.000005	0.0001	0.00003
2,3,3',4,4',5'-HxCB (157)	<0.000005	0.0001	0.00003
2,3',4,4',5,5'-HxCB (167)	<0.000005	0.00001	0.00003
2,3,3',4,4',5,5'-HpCB (189)	<0.000005	0.00001	0.00003

TEF Schemes for brominated dioxins and furans	
Congener	I-TEF
Dioxins	
2,3,7,8-TBDD	1
1,2,3,7,8-PBDD	0.5
1,2,3,4,7,8-HxBDD Note 1	0.1
1,2,3,6,7,8-HxBDD Note 1	0.1
1,2,3,7,8,9-HxBDD	0.1
1,2,3,4,6,7,8-HpBDD	0.01
OBDD	0.001
Furans	
2,3,7,8-TBDF	0.1
2,3,4,7,8-PBDF	0.5
1,2,3,7,8-PBDF	0.05
1,2,3,4,7,8-HxBDF Note 2	0.1
1,2,3,6,7,8-HxBDF Notes 2, 3	0.1
1,2,3,7,8,9-HxBDF Note 3	0.1
2,3,4,6,7,8-HxBDF Note 3	0.1
1,2,3,4,6,7,8_HpBDF	0.01
1,2,3,4,7,8,9-HpBDF Note 3	0.01
OBDF	0.001

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.

The sum of the following PBDDs and PBDFs congeners shall be reported using the associated toxic equivalent factors. The I-TEF values are from table A.1 of EN 1948-1 for PCDD and PCDFs. These have been applied to PBDDs and PBDFs that have equivalent structures in terms of halide atom positions. This is based on the expectation that the toxic effects are equivalent.

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).

TEF Schemes for brominated dioxins and furans

Note 1 – 1,2,3,4,7,8-HxBDD and 1,2,3,6,7,8-HxBDD are co-elutes

Note 2 – 1,2,3,4,7,8-HxBDF and 1,2,3,6,7,8-HxBDFb are co-elutes

Note 3 - Currently, commercially available calibration standards for these congeners are not available. 1,2,3,4,7,8-HxBDF and 1,2,3,6,7,8-HxBDF can be reported as a combined result as they co-elute. For the other 3 congeners the analytical laboratory may not be able to provide an accredited result at the time the permit is granted, it is expected this will change over time and results that reflect this will be accepted.

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 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.
- 7.1.5 A sampling plan shall be agreed in writing with SEPA and shall be maintained and reviewed annually. The sampling plan shall detail the discharges to be sampled and monitored; the sampling point numbers, the NGR and description; the pollutants to be sampled; the method of sampling (spot or composite); the frequency of sampling; and 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.
- 7.1.6 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 follow 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.

- 7.1.7 The information used to estimate mass emissions in compliance with Condition 7.1.6 shall be recorded for each estimate.

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 “Monitoring discharges to water: environmental permitting” guidance documents published by EA at www.gov.uk unless otherwise agreed in writing with SEPA.
- 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 7.1.4 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) A trend chart of the measured value(s) for the reporting period; and;
- b) A summary setting out any date where an ELV was breached and the cause of that breach. ELV breaches must be notified timeously and investigated as required by Conditions 2.5.1 – 2.5.6.

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 role of each person involved in performing the monitoring exercise;
- 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
- e) details of any relevant continuous monitoring reported values for the relevant period.

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 7.4.3 in tabular form and a 12 month rolling trend of the results of the analysis performed.

7.4.3 The Operator shall report a summary of compliance with the Trade Effluent Consent for emission point W1.

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) contaminated rainwater, spillages or firefighting water from containing and extinguishing fires is fully contained.

7.5.2 By three months prior to the Commencement of Commissioning the Operator shall prepare, record 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 four 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 liquid chemicals or fuels 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 the rules specified for the storage of oil under General Binding Rule 28 in Schedule 3 of the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended).
- 7.5.10 Without prejudice to the requirements of Conditions 7.5.1 to 7.5.9, any spillages of waste, fuel or other liquids shall be cleaned up without delay.
- 7.5.11 The Operator shall undertake and record annual inspections of the following structures sufficient to determine their structural integrity:
- a) above ground, below ground, or partially below ground, structures including vessels, sumps, bunds, drains and pipework which contain materials which have the potential to cause pollution ;
 - b) Seals in the building floors and all pipework penetrations;
 - c) waste storage areas; and
 - d) hardstanding and road surfaces, both internal and external.

7.5.12 Any remedial actions identified during the inspections required by Condition 7.5.11 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 four 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. The first assessment shall be provided within 3 years of the date of issue of this permit.
- 7.6.5 The Operator shall monitor the groundwater at the site 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. The first assessment shall be submitted two months prior to the first introduction of chemicals or other raw materials or wastes as required by Condition 2.8.24. The assessment shall comply with relevant guidance (specifically including SEPA guidance document IED-TG-42),

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. The first assessment shall be completed by two months prior to the first introduction of chemicals or other raw materials or wastes as required by Condition 2.8.24. The assessment shall comply with relevant guidance (specifically including SEPA guidance document IED-TG-42), 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 two months in advance of carrying out the monitoring. The monitoring plan shall comply with relevant guidance (specifically including SEPA technical guidance document IED-TG-42) and include the locations at which the monitoring shall be carried out and the methodology which shall be used. The monitoring plan shall take account of the systematic assessment required by Condition 7.6.4.
- 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 the 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 to 7.6.11 inclusive 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 ^{Note 1}

Required by Condition 7.1.4

Source of Emission	Emission number point / Location on site plan	W1	W2
	Emission source	Discharge to combined sewer including boiler blow down, water treatment plant effluent, contaminated surface water	Uncontaminated surface water
	Destination	Combined sewer to Meadowhead treatment works.	Direct discharge to an unnamed tributary leading to the Dundonald burn.
	NGR	NS 33734 36617	NS 33780 36607
Monitoring Details	Sampling location	Sampling chamber on discharge line located upstream of the existing combined sewer pit MH7606 at NS 33766 36617	Sampling chamber on discharge line downstream of the surface water discharge pumps.
	Emissions		To comply with General Binding Rules 10 & 11 as specified within The Water Environment (Controlled Activities) (Scotland) Regulations) 2011
Limits For Parameters from Emission Source	Basis of limit value		
	Temperature °C	No limit	Less than 30
	Flow l/s	No Limit	3.2
	pH	No Limit	No less than 6 and no greater than 9
	Total suspended solids, mg/l	No Limit	60
	Total Organic Carbon, mg/l	No Limit	40

Notes:

1. All analysis shall be undertaken on unfiltered samples.

Table 7.2: Emissions to Water Monitoring RequirementsRequired by Condition 7.1.6

Emission Point	Parameter	Monitoring frequency	Monitoring device type	Monitoring standard or method
W1, W2	Temperature	Continuous	Temperature probe	Latest standard from “Monitoring discharges to water: environmental permitting” guidance documents published by EA at www.gov.uk or as otherwise agreed in writing with SEPA.
W1, W2	Flow	Continuous	Flow meter	
W1, W2	pH	Continuous and weekly periodic monitoring	Continuous and flow proportionate composite sample over 24 hours	
W1, W2	Hydrocarbons	Weekly	Flow proportionate composite sample over 24 hours	
W1, W2	BOD	Weekly		
W2	Conductivity	Weekly		
W1	Total suspended solids	Daily	Flow proportional composite sample over 24 hours	BS EN 872
W2	Total suspended solids	Weekly		BS EN 872
W1, W2	Total Organic Carbon	Weekly		BS EN 1484

Table 7.3: Groundwater Monitoring Requirements

Relevant hazardous substance	Location and activity	Frequency
pH, Aluminium (Al), Antimony (Sb), Arsenic (As), Cadmium (Cd), Cobalt (Co), Hexavalent Chromium (Cr_{IV}), Copper (Cu), Iron (Fe), Lead (Pb), Mercury (Hg), Nickel (Ni), Thallium (Ti), Vanadium, Zinc (Zn), Ammoniacal nitrogen as N, Biochemical oxygen demand, Sulphate, Total phosphate, Polychlorinated dibenzo-p-dioxin/furan(s), Polybrominated dibenzo-p-dioxins and furans, PAH (USEPA speciated), TPH-CWG aliphatic and aromatic split, BTEX (Benzene, Toluene, Ethylbenzene, Xylene) and MTBE (Methyl Tertiary Butyl Ether), Any other RHS or substance specified on the Soil and Groundwater Monitoring Plan not specifically listed above.	All boreholes should be analysed for the full suite of contaminants. The monitoring is designed to cover the following: chemical storage areas, offloading/ loading areas and pipework routes for ammonia urea, fuel-oil, lime and APCr, drains, waste bunker area, bottom ash water tank area, IBA storage and handling and truck loading, oversize skip storage, waste water treatment plant, water treatment plant, and storage areas for oil drums (new and waste oil awaiting collection).	All boreholes once every 5 years. Boreholes downfield of the fuel bunker drainage system annually for: pH; all metals; ammoniacal nitrogen as N; biological oxygen demand; sulphate; total phosphorus, and BTEX, and for the first monitoring after First Operation, parameters as above and also: Polychlorinated dibenzo-p-dioxin/furan(s); Polybrominated dibenzo-p-dioxins and furans, and PAH (USEPA speciated).

Table 7.4: Soil Monitoring Requirements

Relevant hazardous substance	Location and activity	Frequency
pH, Aluminium (Al), Antimony (Sb), Arsenic (As), Cadmium (Cd), Cobalt (Co), Hexavalent Chromium (Cr_{IV}), Copper (Cu), Iron (Fe), Lead (Pb), Mercury (Hg), Nickel (Ni), Thallium (Tl), Vanadium, Zinc (Zn), Ammoniacal nitrogen as N, Sulphate, Total phosphate, Polychlorinated dibenzo-p-dioxin/furan(s), Polybrominated dibenzo-p-dioxins and furans, PAH (USEPA speciated), TPH-CWG aliphatic and aromatic split, BTEX (Benzene, Toluene, Ethylbenzene, Xylene) and MTBE (Methyl Tertiary Butyl Ether), Any other RHS or substance specified on the Soil and Groundwater Monitoring Plan not specifically listed above	All sample locations should be analysed for the full suite of contaminants. The monitoring is designed to cover the following: chemical storage areas, offloading/ loading areas and pipework routes for urea, fuel-oil, lime and APCr, drains, waste bunker area, bottom ash water tank area, IBA storage and handling and truck loading, oversize skip storage, waste water treatment plant, water treatment plant, and storage areas for oil drums (new and waste oil awaiting collection).	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 By three months prior to the Commencement of Commissioning the Operator shall prepare, implement, maintain, record and report a plan (“the Residue Management Plan”) in order that:

- a) the quantity of each residue generated by the Permitted Activities is minimised;
- b) residues are stored, handled, characterised, processed, and where necessary, disposed of in the most appropriate manner; and
- c) the reuse, regeneration, recycling of, and/or energy recovery from the residues are optimised.

8.1.2 The Residue Management Plan required by Condition 8.1.1 shall include for each residue the following information:

- a) the residue source, type and storage location, maximum storage capacity, and typical annual arisings;
- b) how generation of the residue is reduced to a minimum, in amount and harmfulness;
- c) the measures taken to optimise the reuse, recycling or recovery including energy recovery;
- d) where the measures in Condition 8.1.2 c) are not technically or economically feasible, the measures taken to ensure the proper disposal to a suitably licensed facility;
- e) how the method and frequency of sampling and analysis is consistent with recognised European standards including BS EN 14899 “Characterisation of waste – sampling of waste materials”. Refer to

Environment Agency (EA) Technical Guidance Note (Monitoring) M4: Guidelines for Ash Sampling and Analysis (TGN M4) and for Incinerator Bottom Ash (IBA) from municipal waste incineration, the voluntary protocol "A Sampling and Testing Protocol to Assess the Status of IBA", WRc Report Reference UC 9390.05, published by the Environmental Services Association (ESA), January 2018, as amended (commonly known as "The ESA Protocol") for further guidance.

- f) the physical and chemical characteristics (including total soluble fraction and heavy metals soluble fraction), hazard category, polluting potential and handling precautions;
- g) how each residue from differing sources is kept separate from other residues to provide compliance with Condition 8.1.9;
- h) 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.

8.1.3 As a minimum, the characterisation required by Condition 8.1.2 f) shall comprise the following sampling and analysis which shall be carried out and reported according to the requirements of Table 8.1:

- a) the assessment of the concentration of the substances listed in Table 8.1 according to the requirements identified in Table 8.1;
- b) an assessment of the extent and nature of substances which may leach from a sample of each residue according to the requirements identified in Table 8.1 taken no less frequently than once per year;
- c) where relevant, an assessment of the hazardous properties of the waste residues according to the requirements identified in Table 8.1; and,
- d) handling precautions including substances with which the residue should not be mixed.

- 8.1.4 The Residue Management Plan shall be reviewed at least every 2 years, or whenever there is a change to residue classification or recovery/ disposal routes. Each review shall be recorded and reported to SEPA.
- 8.1.5 Notwithstanding Condition 8.1.3, additional samples shall be taken and tested and appropriate action taken, whenever:
- a) disposal or recovery routes change;
 - b) it is known or suspected that the nature or composition of the residues has changed such that the route currently selected may no longer be appropriate.
- 8.1.6 Compliance with Condition 5.1.1 a) shall be assessed by performing tests to confirm the Total Organic Carbon (TOC) content of composite samples of dry slag or bottom ashes according to the requirements and the frequency identified in Table 8.1. The results of the tests shall be recorded and reported to SEPA.
- 8.1.7 The Operator shall ensure that where residues produced by the Permitted Activities are sent to preparation for reuse, recycling, recovery or disposal, the following information is provided to those persons or companies carrying, keeping, treating or disposing of the residue:
- a) the nature of the process producing the waste residues;
 - b) the composition, handling requirements, hazardous properties (if applicable) and the polluting potential of the waste residues required under Condition 8.1.2 f);
 - c) the EWC waste code of the waste residues; and,
 - d) where the residues are to be sent to a landfill site, information to confirm it meets the waste acceptance criteria for that landfill.

Authorisation Number: PPC/A/1197167

- 8.1.8 The Operator shall 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 weekly.
- 8.1.9 Incinerator Bottom Ash (IBA)/ Slags and APCr shall not be mixed.

Table 8.1: Residue Assessment

Required by Condition 8.1.2, 8.1.3, 8.1.5 and 8.1.6

Substance	Residue stream	Monitoring frequency	Monitoring standard or method*	Reporting Requirements
TOC	IBA and other boiler ash / slag	Weekly during first three months from First Operation, then quarterly or as required under Condition 8.1.2 e) and 8.1.5.	BS EN 14899 and EN 13137 or EN 15936.	Weekly for first three months following First operation, then quarterly submission of results except where above threshold in Condition 5.1.1 a). Where above the threshold report as an incident as required under Condition 2.5.
Metals and their compounds (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc)	IBA and other boiler ash / slag	According to proposal for accelerated testing required under Condition 2.9.2 d) and approved by SEPA	BS EN 14899 / EA TGN M4 – Guidelines for Ash Sampling and Analysis' and the ESA protocol.	Quarterly submission of results & WM3 assessment for core hazard properties (e.g. HP 4/7/8/14) Annual Full WM3 assessment of HP1-15 As required under Condition 8.1.2 8.1.5
Total soluble fraction and speciated metal soluble fractions (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc)	IBA and other boiler ash / slag	According to proposal for accelerated testing required under Condition 2.8.17/2.9.2 d) and approved by SEPA quarterly for remainder of First Year of Operation followed by annual or as required under Conditions 8.1.2 e) or Condition 8.1.5	BS EN 14899 / EA TGN M4 – Guidelines for Ash Sampling and Analysis' and the ESA protocol.	First Year of Operation: Quarterly submission of results & WM3 assessment for core hazard properties (e.g. HP 4/7/8/14) and/ Full WM3 assessment of HP1-15 where relevant for testing required under Condition 8.1.2e) Otherwise annual submission of results & Full WM3 assessment or as required under Condition 8.1.5

Substance	Residue stream	Monitoring frequency	Monitoring standard or method*	Reporting Requirements
Polychlorinated dibenzo dioxin and furans, Dioxin-like polychlorinated biphenyls Polycyclic Aromatic Hydrocarbons and Polybrominated dibenzo dioxin and furans, dioxin-like polybrominated biphenyls,	IBA and other boiler ash / slag	According to proposal for accelerated testing required under Condition 2.9.2 d) and approved by SEPA then quarterly or as required under Condition 8.1.2 e) and 8.1.5.	BS EN 14899 / EA TGN M4 – Guidelines for Ash Sampling and Analysis' and the ESA protocol.	Quarterly submission of results & WM3 assessment for core hazard properties (HP 4/7/8/14) Annual Full WM3 assessment of HP1-15 As required under Condition 8.1.2 e) and 8.1.5
Other substances as required to complete WM3 assessment for core hazard properties (e.g. HP 4/7/8/14) Annual Full WM3 assessment of HP1-15	IBA and other boiler ash / slag	According to proposal for accelerated testing required under Condition 2.8.17/2.9.2 d) and approved by SEPA then quarterly or as required under Condition 8.1.2 e) and 8.1.5.	BS EN 14899 / EA TGN M4 – Guidelines for Ash Sampling and Analysis' and the ESA protocol.	Quarterly submission of results & WM3 assessment for core hazard properties (HP 4/7/8/14) Annual Full WM3 assessment of HP1-15 As required under Condition 8.1.5
pH	All residues	Weekly during first three months from First Operation then quarterly or as required under Condition 8.1.2 e) and 8.1.5.	BS EN 14899 / EA TGN M4 – Guidelines for Ash Sampling and Analysis'	Monthly submission of results for first three months following First Operation, then quarterly.

Substance	Residue stream	Monitoring frequency	Monitoring standard or method*	Reporting Requirements
Metals and their compounds (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc)	APCr	Weekly during first three months from First Operation then quarterly or as required under Condition 8.1.5.	BS EN 14899 / Environment Agency TGN M4 – Guidelines for Ash Sampling and Analysis'	Monthly submission of results for first three months following First Operation, then quarterly.
Total soluble fraction and speciated metal soluble fractions (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc)	APCr	Monthly during first three months from First Operation and quarterly for remainder of First Year of Operation, then Annual or as required under Condition 8.1.5	BS EN 14899 / EA TGN M4 – Guidelines for Ash Sampling and Analysis'	NEW SITES. Monthly submission of results for first three months following First Operation, then quarterly for remainder of First Year of Operation. Thereafter annual submission of results or as required under Condition 8.1.5.
Polychlorinated dibenzo dioxin and furans, Dioxin-like polychlorinated biphenyls Polycyclic Aromatic Hydrocarbons Polybrominated dibenzo dioxin and furans, ,	APCr	Monthly during first three months from First Operation then quarterly or as required under Condition 8.1.5.	BS EN 14899 / EA TGN M4 – Guidelines for Ash Sampling and Analysis'	Monthly submission of results for first three months following First Operation, then quarterly.
Free lime	APCr	Weekly during first three months from First Operation then quarterly or as required under Condition 8.1.5.	BS EN 14899 / EA TGN M4 – Guidelines for Ash Sampling and Analysis'	Monthly submission of results for first three months following First Operation, then quarterly.

Substance	Residue stream	Monitoring frequency	Monitoring standard or method*	Reporting Requirements
Moisture	APCr	Weekly during first three months from First Operation then quarterly or as required under Condition 8.1.5.	BS EN 14899 / EA TGN M4 – Guidelines for Ash Sampling and Analysis'	Monthly submission of results for first three months following First Operation, then quarterly.

9 Conditions Applying to Environmental Monitoring Beyond the Installation Boundary

9.1 Environmental Monitoring

- 9.1.1 By three months prior to the Commencement of Commissioning, the Operator shall prepare, record, maintain and report to SEPA an Environmental Monitoring Programme (“Environmental Monitoring Programme or “EMP”). The EMP shall include proposals for the monitoring of concentrations in soil, vegetation and ambient air for the parameters identified in Table 9.1 and according to the requirements in Table 9.1 prior to the Commencement of Commissioning and following subsequent operation.
- 9.1.2 Following receipt of written acceptance by SEPA of the EMP required by Condition 9.1.1, the Operator shall implement the agreed EMP. The results shall be recorded and reported to SEPA.
- 9.1.3 No later than one month 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.
- 9.1.4 Notwithstanding the requirements of Condition 2.2.2, all EMPs, monitoring and assessments reports undertaken in accordance with Conditions 9.1.1 to 9.1.3 inclusive shall be preserved until the permit is surrendered.

Table 9.1: Environmental MonitoringRequired by Condition 9.1.1

Environmental measurement (concentration)	Location Note 1, 2 and 4	Methodology	Number of samples		
			Prior to Commissioning	Year 2 after First Year of Operation	Subsequent years of operation
Dioxins and furans in soil & vegetation	As agreed in writing with SEPA.	Sampling according to ISO 18400-102/104 or as otherwise agreed in writing with SEPA	As agreed in writing with SEPA.	As agreed in writing with SEPA.	As agreed in writing with SEPA.
Heavy metals by species in soil & vegetation. Specific species as agreed in writing with SEPA.	As agreed in writing with SEPA.	Sampling according to ISO 18400-102/104 or as otherwise agreed in writing with SEPA	As agreed in writing with SEPA	As agreed in writing with SEPA.	As agreed in writing with SEPA.
A wind sock and a weather station capable of measurement and recording of wind direction, wind speed and air temperature.	As agreed in writing with SEPA.	According to good practise for selection and siting of weather stations.	Continuously recorded	Continuously recorded	Continuously recorded
Ambient air quality for the following parameters: Oxides of nitrogen, oxides of sulphur, total volatile organic carbon and particulate matter.	As agreed in writing with SEPA.	Latest version of EA Technical Guidance Note (Monitoring) M8 Monitoring Ambient Air or as otherwise agreed by SEPA	Monitors deployed as early as practical, to be agreed in writing with SEPA.	Monitoring in situ from start of commissioning for at least two years, to be agreed in writing with SEPA.	To be agreed in writing with SEPA

10 Conditions Applying to Small Combustion Appliances Subject to Medium Combustion Plant Directive Controls

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 Table 10.1.
- 10.1.1.1 The discharge of any other substance, not specified in Table 10.2 from the medium combustion plant must not cause significant environmental harm.
- 10.1.2 The Operator shall carry out periodic monitoring of emissions 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 10.3.
- 10.1.3 For any parameter specified in Table 10.2, all results of monitoring carried out under Condition 10.1.2 shall be corrected to the reference conditions 273.15 K, 101.3 KPa, the relevant oxygen concentration specified in Condition 10.1.4, dry gas. The results of all tests and data used to correct the monitoring results to the reference conditions specified in this Condition shall be recorded.
- 10.1.4 For the purposes of Condition 10.1.3, the relevant oxygen concentration shall be expressed as 15% v/v.
- 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 1 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. Said report shall contain all information specified in Condition 10.1.5.

10.1.7 The introduction of dilution air to achieve the emission concentrations in Table 10.2 is not permitted.

10.2 Operation of Combustion Plant

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

10.2.2 Medium Combustion Plant 1 must not operate for more than 500 operating hours per year (calculated as a rolling average over five years) and the annual running hours shall be reported.

10.3 Monitoring of Emissions

10.3.1 Monitoring must be undertaken as specified in Table 10.3.

10.3.2 Sample locations must be provided, maintained and appropriately identified so that representative samples of emissions may be safely obtained.

10.3.3 The first monitoring of emissions for Medium Combustion Plant 1 described in Table 10.1 must be undertaken within four months from the latter of:

- a) The grant of this permit; or
- b) The start of operation of the medium combustion plant.

10.3.4 Monitoring must be undertaken when the medium combustion plant is:

- a) Operating under stable conditions at a representative even load; and
- b) Not undergoing start-up or shut-down.

10.3.5 Records of the following must be kept for a minimum of six years:

- a) The type and quality of fuel used;
- b) The operating hours;
- c) The results of all monitoring of emissions to air including combustion efficiency testing results.

Table 10.1: Emission Point Details

Required by Condition 10.1.1

Emission point reference		A3 – Medium Combustion Plant 1, The Emergency Diesel Generator
Type of Medium Combustion Plant		Diesel Engine
Description of Medium Combustion Plant	Manufacturer	Baudouin Moteurs
	Model	12M33G1650/5
	Serial Number	3923L1244
Rated Thermal Input (Megawatts)		3.765
Fuel(s) Used		Gas oil
Annual Operating Hours		<500
Stack Height (metres)		6.1
Stack Location (NGR)		NS 33757 36552

Table 10.2: Emissions to Air ELVs from the Combustion Plant

Required by Condition 10.1.1 and 10.1.2

Substance	Emission Limit Value (mg/Nm ³)
	Medium Combustion Plant 1
Oxides of nitrogen (NO _x)	No limit set
Carbon Monoxide (CO)	No limit set

Table 10.3: Emissions Monitoring Requirements

Substance	Monitoring method	Monitoring frequency
Oxides of nitrogen (NO _x)	BS EN 14792	For plant operating <500hrs at least once every: (a) 1500 hours of operation; or (b) 5 years.
Carbon Monoxide (CO)	BS EN 15058	

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.

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 sectoral or other technical guidance, including BAT Reference Documents published by the European Commission and UK technical guidance published by the Environment Agencies.

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	Not applicable	0800 80 70 60 24 hour pollution hotline
Application for New Permit/ Variation/ Transfer or Surrender	SEPA, Angus Smith Building, Unit 6 4 Parklands Avenue Eurocentral, Holytown North Lanarkshire, ML1 4WQ	Email: registry@sepa.org.uk
For all other communications including change notifications, data returns, incident reports and general enquiries	Local office as confirmed by SEPA Site officer	General enquiries: 03000 996699 Data submissions by Email to: ppcdatareturns@sepa.org.uk Other correspondence by Email to: 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. SEPA Document IED-T-01(TT) – Extended Two Tier Consent Table

This document can be downloaded from the SEPA website www.sepa.org.uk. Should you have any difficulty accessing a copy please contact SEPA for assistance.

13. 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).