

Notice: Variation of Permit

This permit has been varied by the Scottish Environment Protection Agency (SEPA) in exercise of its powers under Regulation 46 of the Pollution Prevention and Control (Scotland) Regulations 2012 ("the Regulations"). The terms used in this notice, unless otherwise defined, have the same meaning as in the Regulations.

Permit Number:	PPC/A/1181922
Site address:	Westfield Energy Recovery Limited Former Westfield Opencast Coal Site Kinglassie Fife KY5 0HQ
Operator:	Westfield Energy Recovery Limited Company Number: SC579887 Registered office address C/O Equitix Management Services Limited Suite 11-10, Avondale House, Strathclyde Business Park, Bellshill, United Kingdom, ML4 3NJ
Variation Number:	VAR02
Effective Date of Variation:	29/05/2024
Details of Variation:	The permit is varied as specified in the Schedule attached.

Permit Number: PPC/A/1181922/VAR02

Schedule

The permit has been varied as follows:

1. All references to 'start up' throughout the permit are changed to 'start-up'.
2. All references to 'shutdown' or 'shutdowns' throughout the permit are changed to 'shut-down' or 'shut-downs' respectively.
3. In the Interpretation of Terms, the following terms: Abnormal Operation, "CHPQA", High level of efficiency, Operation, Medium Combustion Plant, Other Than Normal Operating Conditions, Quality Index value, Residues, Shut-down, Shut-down period, Thermal Treatment of Waste Guidelines, Water Environment are deleted, and are replaced by the following new terms:

"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 in this Permit being exceeded.

"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>;

"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;

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

"Medium Combustion Plant", or "MCP", means a combustion plant with a rated thermal input equal or greater than 1 megawatt (MW) but less than 50 MW;

"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.

Permit Number: PPC/A/1181922/VAR02

“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>;

“Residues” has the same meaning as in Article 43 of the Industrial Emissions Directive and the WI BATCs;

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

“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;

4. In the Interpretation of Terms, the following terms and acronyms are deleted:

“APCr” means Air Pollution Control residue;

“IBA” means Incinerator Bottom Ash”;

“MCP” means Medium Combustion Plant;

5. In the Interpretation of Terms, the following terms are moved to the list of acronyms in alphabetical order at the end of the section:

“AMS” means Automated Measurement Systems;

“CEMS” means Continuous Emission Monitoring Systems;

6. In the Interpretation of Terms, the following new terms are inserted:

“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;

Permit Number: PPC/A/1181922/VAR02

"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;

"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);

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

7. In the Interpretation of Terms, the following new acronyms are inserted into the list of acronyms in alphabetical order:

"BAT – AEEL" means Best Available Technique – Energy Efficiency Level;

"CEN" means Comité Européen de Normalisation (CEN);

"CO" means Carbon Monoxide;

"EDG" means Emergency Diesel Generator (also known as the "standby generator");

"EMS" means Environmental Management System;

"HCl" means Hydrogen Chloride

"HF" means Hydrogen Fluoride

"NH₃" means Ammonia;

"N₂O" means Nitrous Oxide;

"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.

Permit Number: PPC/A/1181922/VAR02

“POPs” means Persistent Organic Pollutants;

“SO₂” means Sulphur Dioxide;

“SUDS” means Sustainable Urban Drainage System;

8. In the Interpretation of Terms the following terms related to Medium Combustion Plant are inserted at the end of the Section after the list of acronyms:

Specific terms relating to the Medium Combustion Plant:

Term	Definition
annual operating hours	The operating hours for any period of 12 consecutive months. Should be read in conjunction with the term ‘operating hours’.
diesel engine	Means an internal combustion engine which operates according to the diesel cycle and uses compression ignition to burn fuel.
existing medium combustion plant	Combustion plant that was put into operation before 20 December 2018.
fuel	Means any solid, liquid or gaseous combustible material.
gas oil	(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) distils at 250°C and of which at least 85% by volume (including losses) distils at 350°C by the ASTM D86 method.
new medium combustion plant	Combustion plant that was put into operation since 20 December 2018.
operating hours	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.
rated thermal input	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.

Permit Number: PPC/A/1181922/VAR02

9. In Schedule 1, paragraph 1.1.3 is deleted and is replaced by the following new paragraph 1.1.3:
- 1.1.3 The Activity carried out at the Stationary Technical Unit is:
- a) The incineration of waste which is described in Schedule 1, Part 1, Chapter 5, Section 5.1, Part A paragraph (b) of 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 of equal to or greater than 1 MW up to and including 20 MW falling within Schedule 1, Part 1, Chapter 1, Section 1.1, Part B (d) of the Regulations.
10. In Schedule 1, paragraph 1.1.4 n) is deleted and is replaced by the following new paragraph:
- n) standby gas-oil fired electrical generation (“the Emergency Diesel Generator” or “EDG”) to provide electrical power to the plant to allow a safe shut-down in the event of loss of generation or the grid supply, and load bank. The EDG comprises a Mitsubishi Model S16R-PTA2 Diesel Engine Serial Number 26875 and has a net rated thermal capacity of approximately 4.85 MWth (Output 1.7 MWe); and,
11. In Schedule 2, Condition 2.2.3 is deleted, and the following new Condition is inserted:
- 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.
12. In Schedule 2, Condition 2.2.6 is deleted, and the following new Condition is inserted:
- 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.
13. In Schedule 2, the following Condition is inserted after Condition 2.3.4:

Permit Number: PPC/A/1181922/VAR02

- 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.
14. In Schedule 2, Condition 2.4.2 is deleted and the following new Conditions are inserted:
- 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 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.
15. In Schedule 2, in Condition 2.6.1 e) the text “(including water)” is deleted and the following new text is inserted “(including water and fuel)”.
16. In Schedule 2, Conditions 2.7.2 and 2.7.3 are deleted and the following new Conditions are inserted:
- 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

Permit Number: PPC/A/1181922/VAR02

- c) include calculations to report the CHPQA Quality Index value and indicative efficiency for the reporting year and an assessment of that performance.
17. In Schedule 2, Conditions 2.7.5 and 2.7.6 are deleted and the following new Conditions are inserted:
- 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 3 months prior to the deadline for compliance with Condition 2.7.4, together with information on the Operators proposals on how and when the requirements of Condition 2.7.4 will be met.
- 2.7.6 Where the Operator complies with Condition 2.7.5, the requirements of Condition 2.7.4 will be dis-applied until such time as the operator has received written confirmation from SEPA, 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 electrical 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. For Plants where the performance test cannot be carried out at full load for technical reasons, the gross electrical 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 3 months prior to carrying a Performance Test required under Condition 2.7.7 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 electrical efficiency of the incineration plant at full load consistent with the requirements under Condition 2.7.7.

Permit Number: PPC/A/1181922/VAR02

18. In Schedule 2, in Condition 2.8.20, the following text “3 months” is deleted and is replaced by the following new text “1 month”.
19. In Schedule 2, Condition 2.10.1 the following text “, and without prejudice to Condition 5.4.6,” is inserted between “part thereof” and “the Operator shall”.
20. In Schedule 2, in Condition 2.12.6 the following text “in writing” is inserted after “SEPA”.
21. In Schedule 2, Tables 2.1 and Table 2.2 are deleted and are replaced by the following new tables.

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
Systems or procedures used to demonstrate compliance with a Condition of this Permit	2.1.4	As determined by variations, reviews and consolidation of permit	2 months prior to Commissioning	N/A
Non-operation during any relevant reporting period in Table 2.1	2.3.3	As required	As right	Within 1 month of end of the reporting period concerned
Waste Data Returns	2.4.1 2.4.2	Every 3 months 28 days from the end of each quarter	As right	First date of 28 January, 28 April, 28 July or 28 October 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	3 months prior to Commissioning	N/A

Permit Number: PPC/A/1181922/VAR02

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Resource utilisation systematic assessment and review and data recording	2.6.1 2.6.2 2.6.3	4 years	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 from the Cessation of Commissioning
Non-compliance with thermal treatment of waste targets in Condition 2.7.4	2.7.5	Single report	As right	3 months prior to deadline required by Condition 2.7.4
Report on Full Performance test undertaken during Commissioning or following significant modification	2.7.7	As required following significant modification	As right	Within 3 months of completing test
Methodology for Full Performance test following significant modification	2.7.8	As required prior to significant modification	As right	3 months prior to test following significant modification
Construction and Commissioning Plan	2.8.2	Every 3 months	As right	30 November 2020 and every 3 months thereafter until the commencement of commissioning.
Detailed Commissioning Plan	2.8.3	Every month	As right	Received and accepted on 2 October 2023.
Report on proposals for Commissioning ELVs	2.8.4	Single report	As right	6 months prior to Commencement of Commissioning
Heat and Power Plan	2.8.5	Single report (subsequent reporting under Condition 2.7.2)	As right	6 months prior to the Commencement of Commissioning and thereafter
Confirmation infrastructure for exporting electricity / heat or steam completed	2.8.6	N/A	As right	Report received and accepted on 14 May 2024.
CFD Modelling Report	2.8.7	N/A	As right	Report received and accepted on 16 April 2024.
Compliance methodology report to verify minimum temperature, residence time and oxygen requirements; confirm optimal position for SNCR dosing points and confirm sufficient monitoring ports	2.8.8	Single report	As right	6 months prior to Commencement of Commissioning

Permit Number: PPC/A/1181922/VAR02

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Report on EMS to meet requirements of BAT 1	2.8.9	Single report	As right	3 months prior to Commencement of Commissioning
Report on methodology to confirm gross electrical efficiency at full load during commissioning	2.8.10	Single report	As right	1 month prior to Commencement of Commissioning
Arrangements for continuous and periodic monitoring of emissions to air	2.8.11	Single report	As right	Report received and accepted on 15 April 2024.
Report on proposals for mercury monitoring to meet requirements of BAT 4	2.8.12	Single report	As right	Report received and accepted on 15 April 2024.
Report on proposals for sampling of dioxins and furans and dioxin-like PCBs to meet requirements of BAT 4	2.8.13	Single report	As right	Report received and accepted on 15 April 2024.
Report on proposals for monitoring of OTNOC (BAT 5)	2.8.14	Single report	As right	6 months prior to Commencement of Commissioning
Report on techniques to limit start-up and shut-down (BAT 16)	2.8.15	Single report	As right	3 months prior to Commencement of Commissioning
Submission of OTNOC Management Plan (BAT 18)	2.8.16	Single report	As right	3 months prior to Commencement of Commissioning
Report on techniques for control of noise and vibration	2.8.17	Single report	As right	18 months prior to Commencement of Commissioning
Report on techniques for control odour	2.8.18	Single report	As right	Report received and accepted on 19 April 2024.
Standby generator design details and air quality assessment	2.8.19	Single report	As right	Report received and accepted on 15 May 2024.
Report on first environmental monitoring results	2.8.20 9.1.2	Within 2 years of First operation and subsequently as agreed in writing with SEPA	As right	1 month prior to Commencement of Commissioning
Report on SUDS design	2.8.21	Single report	As right	Report received and accepted on 5 October 2023.
Drainage and sub-surface structures Plan	2.8.22	Single report	As right	Report received and accepted on 5 October 2023.
Report on fire-water containment design	2.8.23	Single report	As right	6 months prior to Commencement of Commissioning
Report on bulk storage containment	2.8.24	Single report	As right	6 months prior to Commencement of Commissioning

Permit Number: PPC/A/1181922/VAR02

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Bottom Ash Water Tank drawing and technical details	2.8.25	Single report	As right	6 months prior to Commencement of Commissioning
Arrangements for monitoring emissions to Water Environment	2.8.26	Single report	As right	6 months prior to Commencement of Commissioning
Waste acceptance procedures and inspection procedure	2.8.27	Single report	As right	3 months prior to first delivery of waste to site
Protocol for sampling and testing of residues	2.8.28	Single report	As right	3 months prior to Commencement of Commissioning
Drawings and technical description of waste infeed, incinerator, bottom ash system, heat recovery and steam turbine generator and flue gas cleaning system	2.8.29	Single report	As right	6 months prior to Commencement of Commissioning
Plume visibility assessment	2.8.30	Single report	As right	Report received and accepted on 25 September 2021
Report on design of steam blowing equipment	2.8.31	Single report	As right	3 months prior to Commencement of Commissioning
Groundwater borehole and trial pit (location with design and construction details) as part of soil and groundwater monitoring plan (for whole site)	2.8.32	Single report	As right	Report received and accepted on 5 October 2023.
Borehole and trial pit construction & soil sample collection	2.8.33	Single report	As right	6 months prior to first introduction of chemicals, fuels or other raw materials or wastes
Borehole and trial pit construction report & sampling log	2.8.34	Single report	As right	1 month after completion of the boreholes and trial pits required by Condition 2.8.32 & 2.8.33
Groundwater and soils monitoring assessment	2.8.35	Single report	As right	2 months prior to first introduction of chemicals, fuels or other raw materials or wastes
Confirmation that design features are compliant	2.8.36	Single report	As right	Prior to Commencement of Commissioning

Permit Number: PPC/A/1181922/VAR02

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Addendum to initial site condition and baseline report	2.8.37	Single report	As right	31 July 2023
Updated description and BAT justification of proposed techniques for water treatment, metering and minimising water use and effluent generation and quantified water mass balance,	2.8.38	Single report	As right	31 July 2023
Commissioning progress report	2.9.3	Monthly during Commissioning until Cessation of Commissioning	As right	One month after Commencement of Commissioning and monthly thereafter within 2 weeks of the end of each month
Commissioning condition 2.9.4 notification that permit conditions cannot be complied with	2.9.5	As required	As right	Within 24 hours
Final Commissioning report	2.9.6	N/A	As right	Within 1 month of Cessation of Commissioning
Start-up and Shut-down Plan	2.10.1 & 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
Persons engaged in the operation or management of the installation	2.12.4	As required	As right	Prior to First Operation
Conviction of a Relevant Offence	2.12.5	As required	As right	Notification within 7 days of conviction
Notification of change in designated technically competent person(s)	2.12.6	As required	As right	Within 7 days of change
Notification of proposed change to financial provision	2.13.2	As required	As right	3 months prior to change

Permit Number: PPC/A/1181922/VAR02

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Systematic noise assessment and record of action taken	3.1.1	2 years or whenever equipment or other change which could have an adverse impact on noise sensitive receptors	As right	Within 3 months of the Cessation of Commissioning and every two years thereafter
Noise and Vibration Management Plan	3.1.2 3.1.3	2 years or whenever there is a change which could impact emissions	As right	3 months prior to Commencement of Commissioning
Report on acoustic Survey required under Condition 3.1.6	3.1.7	Single report	As right	Within 6 months of the Cessation 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
Olfactory surveys, the results of investigations and remedial action and the results of inspections and maintenance	3.2.4	As required	From issue date of permit	N/A
Notification of operation of the odour extraction and abatement system (OEAS)	3.2.8	As required	From issue date of permit	Within 24 hours of 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
Report of odour modelling exercise required by Condition 3.2.14	3.2.15	Single report	As right	Within 4 months of First Operation
Weighbridge records	3.3.2	Each load	From first acceptance of waste at the Permitted Installation	N/A

Permit Number: PPC/A/1181922/VAR02

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Pest control inspection and details of any subsequent treatment	3.5.2	Daily inspections and as required for subsequent treatment	From first acceptance of waste at the Permitted Installation	N/A
Record of operational management and maintenance system as required for compliance with Permit Conditions and requirements of BAT	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	Monthly	From first acceptance of waste	See 2.4.1 and 2.4.2
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	N/A
Off-site waste disposal	4.3.5	As required	From first acceptance of waste	N/A
Hygiene Plan	4.4.6	As required	From first acceptance of waste	N/A
Rate at which the waste is fed into the incineration plant.	5.2.1 5.2.3	Hourly	From first addition of waste to the Incinerator during Commissioning	N/A
Oxygen and temperature monitoring records	5.2.5 2.4.3/2.4.4	Continuous	From first addition of waste to the Incinerator during Commissioning	N/A
Non-utilisation of heat recovery system	5.2.5 2.4.3/ 2.4.4	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

Permit Number: PPC/A/1181922/VAR02

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
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 for previous calendar quarter 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
OTNOC Management Plan	5.4.6 5.4.7	2 years or whenever there is a change which could impact emissions	As required by Condition 2.8.18 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
Results of AST & QAL 2 Tests	6.2.7	AST - annually QAL 2 Test – once every 5 years	As right	Annually within 6 weeks of completion
QAL 3 procedure and associated records	6.2.8 6.2.9	As required	One month prior to Commissioning of the CEMS	N/A
Recording of maintenance and calibration required by Condition's 6.2.4 to 6.2.9	6.2.10	As required	One month prior to commissioning of the CEMS	N/A
Notification of monitoring equipment calibration inaccuracies or failure of AST or QAL 2	6.2.10	As required	As right	Within one day of identification
Date and time of implementation of new CEMS calibration factors following QAL 2 Test or delay thereof	6.2.14	As required	As right	Within 10 working days of receipt of QAL 2 report by Operator

Permit Number: PPC/A/1181922/VAR02

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
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
Operational details during periodic monitoring	6.4.1	On each occasion of periodic monitoring	From first occasion of periodic monitoring	N/A
Outcome of actions and steps required under Condition 6.4.3 following PCDD/F ELV breach or mercury emission above 10ug/Nm ³	6.4.4	As required	As right	Within 4 weeks of completion of 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	Reporting periods are calendar quarterly for first 4 occasions thereafter reporting 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
Report on proposals for tests to determine the size distribution of the particulate matter in emissions to air which identify the fractions in the PM10 and PM2.5	6.5.3	Single report	As right	Within 6 months of First Operation
Updated air dispersion model and human health risk assessment for Group 1,2 & 3 heavy metals based on actual emissions	6.5.4	Single report	As right	Within 15 months of First Operation

Permit Number: PPC/A/1181922/VAR02

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 and at the site boundary when the incinerator is shut-down.	6.5.5	Single report	As right	Within 3 months of First Operation
Proposals for odour ELV at Emission Point A2	6.5.6	Single report	As right	Within 3 months of First Operation
Report on performance and performance and optimisation of abatement systems	6.5.7	Single report	As right	Within 4 months of First Operation
Further assessment of SNCR system on the feasibility of complying with an ELV for NO _x of 100 mg/Nm ³ as a daily average.	6.5.8	Single report	As right	Within 12 months of First Operation
Emissions to water sampling plan	7.1.6	Annually for forthcoming reporting period 1 January to 31 December	N/A	30 November annually for the following calendar year
Mass emissions to water	7.1.7	Annually for the calendar year	As right	31 January from Commencement of Commissioning
Information used to estimate mass emissions to water	7.1.8	Annually	As right	31 January from Commencement of Commissioning
Effluent arisings report (tankered effluent)	7.1.9	Single report	As right	No later than 12 months from First Operation
Calibration and maintenance of AMS	7.2.3	As required	From issue date of permit	N/A
Electronic recording of continuously monitored effluent data	7.3.1	Continuous	From Commencement of Commissioning	First date of 31 January, 30 April, 31 July or 31 October following First Operation
Reporting of continuous effluent monitoring data	7.3.3	Quarterly reporting within one month of the end of each quarter.	From Commencement of Commissioning	First date of 31 January, 30 April, 31 July or 31 October following First Operation
Periodic effluent monitoring reports	7.4.1 7.4.2	As detailed in Table 7.2	From the Commencement of Commissioning	First date of 31 January, 30 April, 31 July or 31 October for the previous calendar quarter from First Operation
Surface Water, Drainage and Spillage Plan	7.5.2 / 7.5.5	4 years	3 months from the Commencement of Commissioning	N/A

Permit Number: PPC/A/1181922/VAR02

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Site Drainage Plans	7.5.6	As required	6 months from the Commencement of Commissioning and retained until Permit is surrendered	N/A
Annual inspections of impervious areas and record of remedial measures	7.5.10 / 7.5.11	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 first introduction of chemicals, fuels or other raw materials or wastes	4 years from date of first introduction of chemicals, fuels or other raw materials or wastes
Groundwater monitoring	7.6.5	As required/ 5 years	As right	Within 5 years of the report required by Condition 2.8.35 or as agreed in writing with SEPA
Soil monitoring	7.6.6	As required/ 10 years	As right	Within 10 years of the report required by Condition 2.8.35 or as agreed in writing with SEPA
Detailed methodology for groundwater and soil monitoring	7.6.7/ 7.6.9	Within 6 months of each monitoring event	From first set of monitoring prior to Commissioning	At least 3 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	N/A	From issue date of permit and retained until Permit is surrendered	N/A
Residue Management Plan	8.1.1/ 8.1.4	2 Years	As right	3 months prior to the Commencement of Commissioning
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

Permit Number: PPC/A/1181922/VAR02

Summary of information to be recorded/ reported	Condition	Review Frequency	Date first records due to be completed	Date reports due
Soluble fraction & soluble metal fraction - All residues	8.1.3 , 8.1.5 & Table 8.1	Quarterly for first year then annually for the calendar year	From First Operation	Quarterly for First Year of Operation with results submitted within 1 month of end of previous calendar quarter then annually by 31 January for previous calendar year from First Operation
Core Hazardous Properties Assessment IBA and other boiler ash / slag	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	As required for testing under Condition 8.1.2 e) in First year of Operation then annually for the calendar year	From First Operation	Where relevant for testing required under Condition 8.1.2e) within one month of the end of the relevant calendar quarter in First Year of Operation then by 31 January following for previous calendar year
TOC of bottom ashes/ slags	8.1.6 & Table 8.1	Weekly for first 3 months from First Operation then quarterly	As left	31 January, 30 April, 31 July or 31 October for previous calendar quarter from First Operation
Residue dispatches	8.1.8	Daily	From Commencement of Commissioning	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	At least 3 months in advance of carrying out the monitoring required under Table 9.1

Permit Number: PPC/A/1181922/VAR02

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	1 month prior to Commencement of commissioning as detailed in Condition 2.8.20. Subsequent reports within 2 months of completion
Tests and data used to correct reference data	10.3.5	As required by Condition 10.3.5	From Commencement of Commissioning	N/A
Periodic monitoring of emissions from EDG	10.3.6 10.3.7	At the most frequent interval of a) after 1,500 hours of operation, or b) every 5 years	As right	Within 6 months for monitoring undertaken within 4 months of operation and thereafter within 2 months of date of monitoring
EDG mass emissions to air	10.3.9	Annually	As right	First date of 31 January following First Operation
Information used to estimate mass emissions to air	10.3.10	Annually	As required by Condition 10.3.9	N/A
Records required to be kept for MCP	10.5.1 10.5.2	As required	From Commencement of Commissioning	N/A

Permit Number: PPC/A/1181922/VAR02

Table 2.2: Raw Materials, Energy and Fuel

Required by Condition 2.6

Raw material	Unit of Measurement
Electricity (imported)	MWh
Electricity generated (parasitic loading)	MWh
Electricity generated (exported)	MWh
Hot water or steam (exported)	MWh
Hot water or steam (parasitic loading)	MWh
Gas oil	m ³ and KWh
Hydrated lime (calcium hydroxide)	Tonnes
Powdered activated carbon	Tonnes
Ammonia Solution	Tonnes
Water (from mains)	m ³
Water (harvested)	m ³
Boiler water treatment chemicals	m ³

22. In Schedule 3, in Condition 3.1 Noise and Vibration, Condition 3.1.1 and Condition 3.1.2 are deleted and are replaced by the following new Conditions:

3.1.1 Subject to Condition 3.1.2, at least every 2 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.

3.1.2 No later than 3 months prior to the Commencement of Commissioning, the Operator shall prepare, implement, maintain and submit to SEPA a plan ("The noise and vibration management plan or NVMP"). The NVMP shall, in accordance with the findings of the report required under Condition 2.8.17 set out the steps to be taken by the Operator to:

a) prevent and reduce emissions of noise and vibration at all times; and

Permit Number: PPC/A/1181922/VAR02

- b) to ensure that Condition 3.1.1 and Conditions 3.1.3 to 3.1.8 inclusive are complied with; and,
 - c) identify the techniques to ensure that no significant noise and vibration pollution is caused.
23. In Schedule 3 in Condition 3.1.5 the following text in brackets is deleted “as defined in BS4142:2014 and”.
24. In Schedule 3 in Condition 3.1.7 sub-paragraph c) (iv), the following text is deleted “and,”.
25. In Schedule 3, in Condition 3.1 Noise and Vibration, the following new Condition is inserted after Condition 3.1.7:
- 3.1.8 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.
26. In Schedule 3, Condition 3.2 is renamed “Odour Conditions”, and Condition 3.2.3 is deleted and is replaced by the following new Condition:
- 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 shut-down;
 - 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

Permit Number: PPC/A/1181922/VAR02

- (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.
27. In Schedule 3 Odour Conditions, Condition 3.2.6 is deleted and is replaced by the following new Condition:
- 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 all personnel doors shall be closed at all times other than to allow entry and exit of personnel.
28. In Schedule 3 Weighbridge, Condition 3.3.2 is deleted and is replaced by the following new Condition:
- 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.
29. In Schedule 3, Conditions 3.7, 3.7.1 and 3.7.2 are deleted; Conditions 3.6 and Conditions 3.6.1 to 3.6.3 inclusive are renumbered as Conditions 3.7 and Conditions 3.7.1 to 3.7.3 inclusive; and the following new Conditions 3.6 and Condition 3.6.1 are inserted:
- 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.

Permit Number: PPC/A/1181922/VAR02

30. In Schedule 3, renumbered Condition 3.7 is renamed Environmental Management and Maintenance, and renumbered Condition 3.7.1 is deleted and is replaced by the following new Condition:

3.7.1 Within 6 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 4 years.

31. In Schedule 3, Condition 3.7, in renumbered Condition 3.7.3, the cross reference to Condition 3.6.1 is changed to refer to Condition 3.7.1 and after the text “polluting substances” the following additional text is inserted: “including noise”.

32. In Schedule 3, the following new Condition 3.8 and Conditions 3.8.1 and 3.8.2 are inserted:

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.

33. In Schedule 4 Condition 4.1.6 b) is deleted and is replaced by the following new Condition 4.1.6 b):

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

34. In Schedule 4, in Condition 4.3.1 the text “Permit Holder” is deleted and is replaced by the following new text: “Operator”.

Permit Number: PPC/A/1181922/VAR02

35. In Schedule 4, in Condition 4.4.5, the following sentence is inserted after the first sentence “This area shall be kept clear at all times pending the deposit of the waste and shall be located within the enclosed process building.”
36. In Schedule 4, Table 4.1 is deleted and is replaced by the following new Table 4.1:

Table 4.1: Permitted Waste Types

Required by Condition 4.1.1

EWG index number (6 figure code)	Description
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 12	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 10	Combustible waste (refuse derived fuel)
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 03	Other municipal wastes
20 03 01	Mixed municipal wastes

37. In Schedule 5, in Condition 5.1.1 sub-paragraph's a) and b) are deleted and are replaced by the following new sub-paragraph's:
- 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 and bottom ashes;
 - b) an oxygen concentration of not less than 3% v/v (expressed in terms of dry gas) is maintained in the flue gases exiting the secondary combustion zone;
38. In Schedule 5, in Condition 5.2.4, the text “ELV” is deleted and is replaced by the following new text “Emission Limit Values (ELVs)”.

Permit Number: PPC/A/1181922/VAR02

39. In Schedule 5, Condition 5.2.5 is deleted and is replaced with the following new Condition:

5.2.5 A record shall be kept of all times when the incineration plant is operating, and the heat recovery system is not utilised with the reason for the non-utilisation. The record shall be submitted annually in the report required under Condition 2.4.3.

40. In Schedule 5, in Condition 5.3.2 c), the text “emission limit value (ELV)” is deleted and is replaced by the following new text “ELV”.

41. In Schedule 5, Condition 5.4 the text “(OTNOC)” is inserted after “Other Than Normal Operating Conditions”.

42. In Schedule 5, Condition 5.4.2 is deleted, Condition 5.4.3 is renumbered as Condition 5.4.2, Conditions 5.4.4 to Condition 5.4.10 are deleted and the following new Conditions are inserted:

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.

Permit Number: PPC/A/1181922/VAR02

- 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 The Operator shall implement and maintain the risk-based OTNOC Management Plan (the “OTNOC” Management Plan”) required under Condition 2.8.16. The OTNOC Management Plan shall include the following:
- a) a list of potential OTNOC scenarios, including failure of critical equipment and start-up and shut-down 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) 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 2 years, or whenever there is a change which could have an impact on emissions to air or water during OTNOC, the Operator shall review the OTNOC Management Plan required by Condition 5.4.6. Each review of this plan and any revisions shall be recorded.

Permit Number: PPC/A/1181922/VAR02

43. In Schedule 5, Table 5.1 is deleted.
44. In Schedule 6, in Condition 6.1 Air Emissions Conditions and Limits, Conditions 6.1.1 to Condition 6.1.14 inclusive are deleted and are replaced by the following new Conditions:
- 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 and Condition 6.1.13.
 - 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 Condition's 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, calculated and recorded as required by Conditions 6.3.1 to 6.3.8, shall exceed the daily average limit for that parameter in Table 6.2.
 - 6.1.7 Subject to Condition 5.4.5, the reported values for the continuously monitored concentrations of those substances in Table 6.2 in gaseous

Permit Number: PPC/A/1181922/VAR02

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 Condition 6.4.1 to 6.4.7, shall not exceed the relevant concentration limit stipulated in Table 6.2.

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

6.1.11 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 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.

Permit Number: PPC/A/1181922/VAR02

- 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.
45. In Schedule 6, in Condition 6.2 Monitoring Requirements and Standards, Condition's 6.2.3 to 6.2.5 are deleted and are replaced by the following new Conditions:
- 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.
46. In Schedule 6, in Condition 6.2.10, the following text "email or fax" is deleted and the following new text "or email" is inserted.
47. In Schedule 6, in Condition's 6.2.11 and 6.2.13, the following text "and CEN/TS 15675" is deleted.
48. In Schedule 6, the following new Condition 6.2.14 is inserted after Condition 6.2.13:
- 6.2.14 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.

Permit Number: PPC/A/1181922/VAR02

49. In Schedule 6, in Condition 6.3 Data Handling and Reporting - Continuous Emissions Monitoring, Condition 6.3.4 is deleted and is replaced by the following new Condition:

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 6.2.14.

50. In Schedule 6, in Condition 6.4 Data Handling and Reporting - Periodic Monitoring, Condition's 6.4.1 to 6.4.5 are deleted and the following new Conditions are inserted:

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;

Permit Number: PPC/A/1181922/VAR02

- 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 ug/Nm³ mercury in Table 6.2, the Operator shall:
- a) have regard to the relevant actions in the Environment Agency PCDD-F Protocol and the EA Mercury CEMS Protocol;
 - b) in relation to PCDDF, or mercury where the ELV is exceeded, identify and implement such steps as are necessary to prevent further possible incidents as required under Conditions 2.5.1 c) and 2.5.6; and,
 - c) identify when the relevant monitoring protocol indicates a requirement to install long-term sampling for PCDD/Fs and Dioxin-like PCB's, and/ or mercury CEMS.
- 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).

Permit Number: PPC/A/1181922/VAR02

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 6.4.6 b) shall include an assessment of the longer-term trend of differences recorded in periodic monitoring exercises.

51. In Schedule 6, Condition 6.5.2 is deleted and is replaced by the following new Condition:

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

52. In Schedule 6, Condition 6.5.5 is deleted, and the following new Conditions are inserted:

6.5.5 Without prejudice to Condition 2.9.2 (i), within 3 months of First Operation the Operator shall submit a written report to SEPA on the proposals for the frequency of monitoring of odour at Emission Point A2 for occasions when the incinerator is shut-down.

6.5.6 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 an ELV for odour at Emission Point A2 for occasions when the incinerator is shut-down. Said ELV shall be based on the level required to achieve an emission of no greater 1.5 OU_E/m³ at the site boundary as a 98th percentile of hourly averages.

Permit Number: PPC/A/1181922/VAR02

- 6.5.7 Within 4 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 bag filter for abatement of particulate emissions.
- 6.5.8 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. 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.

Permit Number: PPC/A/1181922/VAR02

53. In Schedule 6, Table 6.2 and the notes beneath Table 6.2 are deleted and is replaced by the following new Table 6.2 and notes:

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

Required by Condition 6.1.1

Emission Point	Parameter	ELV (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1	Particulate matter	5 mg/Nm ³	Daily average	Continuous measurement	BS EN 14181 BS EN 15267-3
		30 mg/Nm ³	100% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		10 mg/Nm ³	97% ½ hour	Continuous measurement	BS EN 14181 BS EN 15267-3
		10 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement – Quarterly for First Year of Operation 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
		200 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement – Quarterly for First Year of Operation then once every 6 months	BS EN 14792
A1	Sulphur dioxide	30 mg/ Nm ³	Daily average	Continuous measurement	BS EN 14181 BS EN 15267-3
		200 mg/ Nm ³	100% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		50 mg/ Nm ³	97% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		60 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement – Quarterly for First Year of Operation 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

Permit Number: PPC/A/1181922/VAR02

Emission Point	Parameter	ELV (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
					BS EN 15267-3
		100 mg/ Nm ³	100% ½ hour average	Continuous measurement	BS EN 14181 BS EN 15267-3
		150 mg/ Nm ³ Note 5	95% 10 minute average	Continuous measurement	BS EN 14181 BS EN 15267-3
		100 mg/ Nm ³ Note 5	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement – Quarterly for First Year of Operation then once every 6 months	BS EN 15058
A1	Gaseous and vaporous organic substances expressed as Total Organic Carbon (TOC)	5 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
		10 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement – Quarterly for First Year of Operation 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
		12 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement – Quarterly for First Year of Operation then once every 6 months	BS EN 1911
A1	Hydrogen Fluoride (HF)	1 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement – Quarterly for First Year of Operation then once every 6 months	CEN TS 17340
A1	Ammonia (NH ₃)	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 of Operation then once every 6 months	BS EN ISO 21877
A1	Nitrous oxide (N ₂ O)	None set	Daily average	See Note 6. Continuous measurement	BS EN 14181 BS EN 15267-3

Permit Number: PPC/A/1181922/VAR02

Emission Point	Parameter	ELV (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
			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 21258
A1	Carbon dioxide (CO ₂)	None set	Daily average	See Note 7. Continuous measurement	BS EN 14181 BS EN 15267-3
A1 Note 1	Cadmium & thallium and their compounds (total)	0.015 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement – Quarterly for First Year of Operation then once every 6 months	BS EN 14385
A1 Note 1	Mercury and its compounds	20 ug/Nm ³ (Continuous or periodic), or 10 ug/Nm ³ Long-term sampling	See Note 2: daily average, long-term average or average value of three consecutive measurements of at least 30 minutes each	See Note 2. Continuous sampling or Periodic Measurement – Accelerated testing/ Quarterly for First Year of Operation then once every 6 months	BS EN 13211 (periodic) Note 1 BS EN 14181, BS EN 15267-3, BS EN 14884 (continuous)
A1 Note 1	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	0.2 mg/Nm ³	Average value of three consecutive measurements of at least 30 minutes each	Periodic Measurement – Quarterly for First Year of Operation then once every 6 months	BS EN 14385
A1	Polychlorinated dibenzo-p-dioxins and furans (PCDD/F) (I-TEQ)	<0.01-0.06 ng I-TEQ/Nm ³ (Long-term sampling) or <0.01-0.04 ng I-TEQ/Nm ³ (Periodic monitoring)	Monthly average or Average value over single measurement of 6 to 8 hours Note 3	See Note 3. Continuous sampling or Periodic Measurement – Accelerated testing / quarterly for First Year of Operation according to Condition 6.5.2 then once every 6 months	No EN Standard for long-term sampling or BS EN 1948-2 and 3
	PCDD/F (WHO-TEQ Humans/Mammals)	None set			
	PCDD/F (WHO-TEQ Fish)	None set			
	PCDD/F (WHO-TEQ Birds)	None set			
A1	Dioxin-like PCBs (WHO-TEQ Humans/Mammals)	None set	Monthly average or Average value over single measurement of 6 to 8 hours	See Note 3. Continuous sampling or Periodic Measurement - Accelerated testing / quarterly First Year of Operation then once every 6 months	No EN Standard for long-term sampling; BS EN 1948-2 and 3 or BS EN 1948-1, 2 and 4
	Dioxin-like PCBs (WHO-TEQ Fish)				
	Dioxin-like PCBs (WHO-TEQ Birds)				

Permit Number: PPC/A/1181922/VAR02

Emission Point	Parameter	ELV (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
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 CEN 1948-5 for long-term sampling
A1	Total and speciated poly-cyclic aromatic hydrocarbons	None set	Average over 3 consecutive samples	See Note 4. Periodic Measurement Quarterly for First Year of Operation then once every 6 months	BS ISO 11338-1 and BS-ISO 11338-2.
A1	Smoke	Ringlemann shade 1	During start-up	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	ELV to be confirmed in writing with SEPA following completion of the report required by Condition 6.5.6	Average over 3 consecutive measurements	As required by Condition 3.2.14 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. Continuous monitoring applies where the report submitted under Condition 6.5.1 confirms that the waste feed does not have a proven low and stable mercury content.
3. The limit of <0.01-0.06 ng I-TEQ/Nm³ for long-term sampling applies where emission levels of PCDD/Fs in the report submitted under Condition 6.5.2 confirms that the emission levels of PCDD/Fs are not sufficiently stable. No ELV applies to dioxin-like PCBs, this is a monitoring requirement only. Note that periodic monitoring for PCDD/F (and dioxin-like PCBs) will still be required irrespective of whether long-term sampling for PCDD/F is also employed.
4. Total PAHs to be reported expressed as Benzo(a)pyrene and the following speciated PAHs require monitoring: anthanthrene, benzo[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo(b)naph(2,1-d)thiophene, benzo(c)phenanthrene, benzo(ghi)perylene, benzo(a)pyrene, cholanthrene, chrysene, cyclopenta (c,d)pyrene, dibenzo[ah]anthracene, dibenzo(ai)pyrene, fluoranthene, indeno(1,2,3-cd)pyrene and naphthalene.
5. 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 paragraph 1.1 d)(i)).

Permit Number: PPC/A/1181922/VAR02

6. CEMS for nitrous oxide. 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.
7. 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. Periodic monitoring standard required for calibrations during QAL2 / AST is CEN TS 17405.

Permit Number: PPC/A/1181922/VAR02

54. In the heading for Table 6.2a the following text “(Condition 5.4.6 requirements)” is deleted and is replaced by the following new text: “(Condition 5.4.5 requirements)” and in the 3rd column of Table 6.2a, the heading “limit (including unit)” is deleted and replaced with “ELV (including limit)”.
55. In Schedule 6, Table 6.2b is deleted.
56. In Schedule 6, Table 6.5 and the notes under Table 6.5 are deleted and are replaced by the following new Table 6.5 and notes:

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 1990	WHO-TEF 1998		WHO-TEF 2005
	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

Permit Number: PPC/A/1181922/VAR02

TEF Schemes for dioxin like PCBs			
Congener	WHO-TEF 1998		WHO-TEF 2005
	Fish	Birds	Humans / Mammals
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
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:

1. 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.

Permit Number: PPC/A/1181922/VAR02

2. 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.
3. 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.
4. 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).
5. TEF Schemes for brominated dioxins and furans
 - a) 1,2,3,4,7,8-HxBDD and 1,2,3,6,7,8-HxBDD are co-elutes
 - b) 1,2,3,4,7,8-HxBDF and 1,2,3,6,7,8-HxBDFb are co-elutes
 - c) 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.
57. In Schedule 7, in Condition 7.1.4 the text: "limit" is deleted and is replaced by the following new text: "ELV, or".
58. In Schedule 7, in Condition 7.1.7 the text: "make reference to" is deleted and is replaced by the following new text: "follow".
59. In Schedule 7, Condition 7.1.9 is deleted and is replaced by the following new Condition:
 - 7.1.9 Without prejudice to the report required by Condition 2.4.1, no later than 12 months from First Operation, the Operator shall submit a report containing details of process effluent sent for off-site treatment and disposal. The report shall include the following:
 - a) Quantity, chemical composition based on analysis of statistically representative number of loads and identification of the European Waste Catalogue (EWC) code based on the proposals provided in response to the report required by Condition 2.8.26;
 - b) Full address for treatment/ disposal site including details of environmental licence;
 - c) Full details of treatment to be received.

Permit Number: PPC/A/1181922/VAR02

60. In Schedule 7, in Condition 7.2.1 the following text: “as listed in SEPA Guidance or the latest version of Environment Agency Guidance Note M18” is deleted and is replaced by the following new text: “Monitoring discharges to water: environmental permitting” guidance documents published by EA at www.gov.uk unless otherwise agreed in writing with SEPA”.
61. In Schedule 7, Condition 7.4 Data handling and Reporting – Periodic Monitoring in Condition 7.4.1 b) the text “identity” is deleted and is replaced by the following new text: “role”.
62. In Schedule 7, in Condition 7.4.1 c) the text “and” is deleted from the end of the sub-condition and is inserted at the end of Condition 7.4.1 d).
63. In Schedule 7, in Condition 7.4.1 the following new paragraph is inserted after Condition 7.4.1 d):
- e) details of any relevant continuous monitoring reported values for the relevant period.
64. In Schedule 7, Condition 7.5.1 d) is deleted and is replaced with the following new Condition 7.5.1 d):
- d) contaminated rainwater, spillages or firefighting water from containing and extinguishing fires is fully contained.
65. In Schedule 7, Condition 7.5.5, the text “5 years” is deleted and is replaced by the text “4 years”.
66. In Schedule 7, Condition 7.5.10 a) is deleted and is replaced by the following new Condition 7.5.1 a):
- 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;
67. In Schedule 7, the following new Condition is inserted after Condition 7.5.11:
- 7.5.12 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.
68. In Schedule 7, Conditions 7.6.1 to 7.6.11 are deleted and are replaced by the following new Conditions:

Permit Number: PPC/A/1181922/VAR02

- 7.6.1 Unless specified elsewhere in this permit there shall be no emission of any pollutants to groundwater or soil from the Permitted Installation.
- 7.6.2 The Operator shall maintain a record of any incident that has, or might have, impacted on the condition of any soil or groundwater under the Permitted Installation, either as a result of that incident or as a result of an accumulation of incidents, together with a record of any further investigation or remediation work carried out.
- 7.6.3 Notwithstanding the requirements of Condition 2.2.2, the record required by Condition 7.6.2 shall be preserved until this permit is surrendered.
- 7.6.4 At least every 4 years, the Operator shall carry out a systematic assessment of all measures used to prevent emissions from the Permitted Installation to soil and groundwater. A written report of each assessment shall be recorded and reported to SEPA. The report shall include details of, and timescales for, any additional measures that are required to prevent emissions to soil and groundwater. The first assessment shall be provided within 4 years of the date of the first introduction of chemicals, fuels or other raw materials or wastes.
- 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 2 months prior to first introduction of chemicals, fuels or other raw materials or wastes as required by Condition 2.8.35. The assessment shall 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

Permit Number: PPC/A/1181922/VAR02

Substances. Each assessment shall be recorded and reported to SEPA. The first assessment shall be submitted 2 months prior to first introduction of chemicals, fuels or other raw materials or wastes as required by Condition 2.8.35. The assessment shall 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 three 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 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, 7.6.5, 7.6.6, 7.6.8 and 7.6.9 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.

Permit Number: PPC/A/1181922/VAR02

69. In Schedule 7, in Table 7.2 the following changes are made:

- a) in the rows for pH, Temperature, Flow and Conductivity, the references to “EA M18” in the 5th column are deleted and are replaced by the following text: “Monitoring discharges to water: environmental permitting” guidance documents published by EA at www.gov.uk”; and,
- b) in the row for Total Suspended Solids, the text in the 5th column is deleted and replaced by the following text: “BS EN 872 or as otherwise agreed in writing with SEPA”.

70. In Table 7.3 Groundwater Monitoring Requirements in the following rows the following changes are made:

- a) the row for calcium hydroxide is deleted and the following row is inserted:

Calcium Hydroxide (testing for calcium ions and pH)	Silos storage area and area of direct feed into the flue gas treatment system	At least once every 5 years
---	---	-----------------------------

- b) the following rows are inserted at the end of the table:

Aluminium	To cover all areas	At least once every 5 years
Chloride	To cover all areas	At least once every 5 years
Polychlorinated dibenzo-p-dioxin/furans	APCr silo area, IBA storage bunker area, waste bunker area, boiler hall pit and bottom ash water tank area	At least once every 5 years
Polybrominated dibenzo-p-dioxins and furans	APCr silo area, IBA storage bunker area, waste bunker area, boiler hall pit and bottom ash water tank area	At least once every 5 years

Permit Number: PPC/A/1181922/VAR02

71. In Table 7.4 Soil Monitoring Requirements in the following rows the following changes are made:

a) the row for calcium hydroxide is deleted and the following row is inserted:

Calcium Hydroxide (testing for calcium ions and pH)	Silos storage area and area of direct feed into the flue gas treatment system	At least once every 10 years
---	---	------------------------------

b) the following rows are inserted at the end of the table:

Aluminium	To cover all sample areas	At least once every 10 years
Chloride	To cover all sample areas	At least once every 10 years
Polychlorinated dibenzo-p-dioxin/furans	APCr silo area, IBA storage bunker area, waste bunker area, boiler hall pit and bottom ash water tank area	At least once every 10 years
Polybrominated dibenzo-p-dioxins and furans	APCr silo area, IBA storage bunker area, waste bunker area, boiler hall pit and bottom ash water tank area	At least once every 10 years

72. Schedule's 8 to 10 and the Explanatory Notes are deleted, and the following new Schedules and Explanatory Notes are inserted:

Permit Number: PPC/A/1181922/VAR02

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 3 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”,

Permit Number: PPC/A/1181922/VAR02

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; or

Permit Number: PPC/A/1181922/VAR02

- 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.
- 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 daily.
- 8.1.9 Incinerator Bottom Ash (IBA)/ Slags and APCr shall not be mixed.

Permit Number: PPC/A/1181922/VAR02

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 (dry weight)	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 either EN 13137 or EN 15936 for TOC.	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 2.8.28 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 (e.g. HP 4/7/8/14) Annual Full WM3 assessment of HP1-15 As required under Condition 8.1.2 e) and 8.1.5
Total soluble fraction and speciated metal 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 2.8.28 and approved by SEPA then quarterly for remainder of First Year of Operation and then 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/ or Full WM3 assessment of HP1-15 where relevant for testing required under Condition 8.1.2e) Otherwise Annual Submission of results and Full WM3 assessment or as required under Condition 8.1.2 e) and 8.1.5

Permit Number: PPC/A/1181922/VAR02

Substance	Residue stream	Monitoring frequency	Monitoring standard or method*	Reporting Requirements
Polychlorinated dibenzo dioxin and furans, Dioxin-like polychlorinated biphenyls Polycyclic Aromatic Hydrocarbons Polybrominated dibenzo dioxin and furans, Dioxin-like polybrominated biphenyls,	IBA and other boiler ash / slag	According to proposal for accelerated testing required under Condition 2.8.28 and approved by SEPA following, 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 2.8.28 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
pH	All residues	According to proposal for accelerated testing required under Condition 2.8.28 and approved by SEPA, otherwise monthly for first 3 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
Metals and their compounds (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc)	APCr	Weekly/monthly 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 / 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 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 annually 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 for remainder of First Year of Operation. Thereafter annual submission of results or as required under Condition 8.1.5

Permit Number: PPC/A/1181922/VAR02

Substance	Residue stream	Monitoring frequency	Monitoring standard or method*	Reporting Requirements
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 8.1.2 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.
Free lime	APCr	Monthly 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.
Moisture	APCr	Monthly 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.

Permit Number: PPC/A/1181922/VAR02

9 CONDITIONS APPLYING TO ENVIRONMENTAL MONITORING BEYOND THE INSTALLATION BOUNDARY

9.1 Environmental Monitoring

- 9.1.1 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 and 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 Notwithstanding the requirements of Condition 2.2.2, all EMPs, monitoring and assessment reports undertaken in accordance with Condition's 2.8.20, 9.1.1 and Condition 9.1.2 shall be preserved until the permit is surrendered.

Permit Number: PPC/A/1181922/VAR02

Table 9.1: Environmental MonitoringRequired by Condition 9.1.1

Environmental measurement (concentration)	Location	Methodology	Number of samples		
			Prior to Commissioning	Year 2 after First Year of Operation	Subsequent years of operation
Dioxins and furans and dioxin-like PCBs in soil. ^{Note 3}	As agreed in writing with SEPA. ^{Note 1 to 4}	Sampling according to ISO 18400-102/104 or as otherwise agreed in writing with SEPA	As agreed in writing with SEPA. ^{Note 1 - 4}	As agreed in writing with SEPA following initial prior to commissioning assessment. ^{Note 1 - 4}	As agreed in writing with SEPA following previous assessment. ^{Note 1 - 4}
Heavy metals in soil for the following heavy metals and their compounds: arsenic, cadmium, chromium and nickel. ^{Note 3}	As agreed in writing with SEPA. ^{Note 1 to 4}	Sampling according to ISO 18400-102/104 or as otherwise agreed in writing with SEPA	As agreed in writing with SEPA. ^{Note 1 - 4}	As agreed in writing with SEPA following initial prior to commissioning assessment. ^{Note 1 - 4}	As agreed in writing with SEPA following previous assessment. ^{Note 1 - 4}
Meteorological station measuring wind direction/ wind speed/ temperature, relative humidity, precipitation etc as agreed in writing ^{Note 5}	As agreed in writing with SEPA. ^{Note 1, 2, 4 and 5}	As detailed in Note 5.	Continuous during each ambient air monitoring survey	Continuous during each ambient air monitoring survey	Continuous during each ambient air monitoring survey
Ambient air quality for the following parameters: PM ₁₀ PM _{2.5} the following heavy metals and their compounds: arsenic, cadmium, chromium and nickel	As agreed in writing with SEPA following completion of Environmental Monitoring Programme under Condition 9.1.1. ^{Note 1 and 4}	Latest version of EA Technical Guidance Note (Monitoring) M8 Monitoring Ambient Air or as otherwise agreed in writing with SEPA.	3 month survey at location of maximum impact from dispersion modelling as agreed following completion of Environmental Monitoring programme under Condition 9.1.1.	3 month survey at location of maximum impact from dispersion modelling	3 month survey at location of maximum impact from dispersion modelling to be undertaken at least once every 3 years unless otherwise agreed in writing with SEPA

Permit Number: PPC/A/1181922/VAR02**Notes**

1. Where off-site monitoring is required consultation with landowner is required as detailed in Regulation 24 and Schedule 6 of the Regulations.
2. Location should include at least one at location of maximum impact from dispersion modelling and one upwind of prevailing wind direction.
3. Soil samples. These should be collected no more than 10cm in depth. Analysis of Total heavy metals by aqua regia digestion. There may be a need to differentiate metallic forms in some circumstances, e.g. between chromium(III) and chromium(VI) due to variations in toxicity and therefore environmental impact.
4. National Grid Reference (10 figure) for all locations should be recorded by GPS to +/- 1 metre.
5. Met Station will require appropriate demonstration of quality control including calibration and verification checks on deployment plus ongoing periodic checks on alignment of the wind sensor and spot checks on the anemometer.

Permit Number: PPC/A/1181922/VAR02

10 CONDITIONS APPLYING TO THE OPERATION OF THE EMERGENCY DIESEL GENERATOR

10.1 Medium Combustion Plant Conditions

10.1.1 The Medium Combustion Plant (MCP) described in paragraph 1.1.3 b) in Schedule 1 shall comprise the Emergency Diesel Generator (EDG) with a net rated input of approximately 4.85 MWth as described in paragraph 1.1.4 n) in Schedule 1.

10.1.2 The permitted fuel for the EDG shall be gas-oil.

10.1.3 The Emission Point details for the MCP are detailed in Table 10.1.

10.2 Start-up and Shut-down

10.2.1 The Operator shall undertake all reasonable steps to ensure periods of start-up and shut-down of the MCP are kept as short as possible.

10.3 Air Emission Conditions

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

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

10.3.3 Monitoring of emissions must be undertaken when the MCP is:

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

10.3.4 The first monitoring of emissions for the EDG must be undertaken within four months from the later of:

- a) the issue date of this variation; or
- b) the start of the operation of the MCP.

10.3.5 For any parameter specified in Table 10.2, other than smoke, all results of monitoring, carried out under Condition 10.3.2 shall be corrected to the reference conditions 273.15K, 101.3kPa and 15% oxygen v/v, dry gas.

Permit Number: PPC/A/1181922/VAR02

The results of all tests and data used to correct the monitoring results to the reference conditions specified in this Condition shall be recorded and reported.

- 10.3.6 The Operator shall record the date, time, duration and results of all periodic monitoring carried out under condition 10.3.2. For each result, the report shall include: the operational rate of the MCP 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.
- 10.3.7 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 all information specified in Conditions 10.3.5 and 10.3.6 and must be submitted to SEPA no later than two months from the date on which monitoring was undertaken.
- 10.3.8 All emission to air, from the MCP other than steam or water vapour, shall be colourless and free from persistent mist, fumes and droplets.
- 10.3.9 The Operator shall record and report the mass emission results as tonnes per year for the parameters, estimated based on representative sampling and analysis for the parameters of the stack emissions specified in Table 10.2. 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.
- 10.3.10 Information used to estimate mass emissions in compliance with Condition 10.3.9 shall be recorded for each estimate.

10.4 Operating Hours

- 10.4.1 The MCP, as defined in Condition 10.1.1 shall not be operated for more than 500 operating hours per year (as a rolling average over a period of three years).

10.5 Record Keeping

- 10.5.1 The Operator shall keep the following records relating to the operation of the MCP as described in Conditions 10.1.1 to 10.1.3:

Permit Number: PPC/A/1181922/VAR02

- a) the Permit;
- b) the type and quantity of fuel used;
- c) the total annual hours of operation for the MCP for each year;
- d) all monitoring results and verification of compliance with Conditions 10.3.1 to 10.3.10; and
- e) incidents reported under Conditions 2.5.4 to 2.5.6.

10.5.2 The records required by Condition 10.5.1 shall be kept for a minimum of six years and provided to SEPA upon request.

Permit Number: PPC/A/1181922/VAR02

Annex 1 to Schedule 10 – Emissions to Air

Table 10.1: Emission Point Details

Required by Condition 10.1.1 and 10.3.1

Emission point number and location on site plan	A3
Emission source	Emergency Diesel Generator
Stack height (m)	6.8
Diameter (m)	0.418
NGR	NT 19965 98157

Table 10.2: Emissions to Air Monitoring Requirements

Required by Condition 10.3.2

Emission Point	Parameter (including unit)	ELV	Monitoring frequency	Operational Mode	Monitoring standard or method
A3	Oxides of nitrogen (NO and NO ₂ (expressed as NO ₂) (mg/Nm ³))	None set	The most frequent interval of each 1500 hours of operation or once every 5 years	Operating under stable conditions at a representative even load and not undergoing start-up or shut-down	BS EN 14792
A3	Carbon Monoxide (mg/Nm ³)	None set	The most frequent interval of each 1500 hours of operation or once every 5 years		BS EN 15058
A3	Oxygen (%)	None set	The most frequent interval of each 1500 hours of operation or once every 5 years		BS EN 14789
A3	Temperature (°C)	None set	The most frequent interval of each 1500 hours of operation or once every 5 years		BS EN 16911-1
A3	Water vapour (%)	None set	The most frequent interval of each 1500 hours of operation or once every 5 years		BS EN 14790
A3	Flow (Nm ³ /Hour)	None set	The most frequent interval of each 1500 hours of operation or once every 5 years		BS EN 16911-1

Permit Number: PPC/A/1181922/VAR02

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

Permit Number: PPC/A/1181922/VAR02

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 and/ or email address as confirmed by SEPA Site officer	Tel: 03000 996699 Email: wasteandindustry@sepa.org.uk

Permit Number: PPC/A/1181922/VAR02

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.

Permit Number: PPC/A/1181922/VAR02

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

9. BREACH OF A PERMIT CONDITION

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

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

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

10. RECORDED SYSTEMS, PROCEDURES OR INFORMATION RECORDING/ RETURN REQUIREMENTS

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

11. SYSTEMATIC ASSESSMENT (AND REVIEW)

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

12. COMMERCIAL CONFIDENTIALITY

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