

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Brite Partnership (North East) Limited
Templeborough Biomass Energy Development
Firth Rixson Ickles Works
Sheffield Road
Rotherham
S60 1BN

Variation application number

EPR/GP3433WS/V002

Permit number

EPR/GP3433WS

Templeborough Biomass Energy Development

Permit number EPR/GP3433WS

Introductory note

This introductory note does not form a part of the notice.

Under the Environmental Permitting (England & Wales) Regulations 2010 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

This variation notice authorises the amendment of various parts of the original permit application as follows:

- replacement of the Solid Biomass CHP Plant (75 MWth) with a combined heat and power-ready (CHP-R) Solid Biomass Plant (125 MWth);
- removal of the Liquid Biomass Plant; and
- removal of the Wood Pellet Manufacturing Plant

The facility is an installation, whose main purpose is the generation of energy using waste as a fuel in a waste co-incineration plant. The relevant listed activity is Section 5.1 A(1)(b): *The incineration of non-hazardous waste in a waste co-incineration plant with a capacity exceeding 3 tonnes per hour*. The permit implements the requirements of the EU Directive on Industrial Emissions (IED). The main features of the Installation are as follows:

The Templeborough Biomass Energy Development consists of a biomass-fuelled electricity generating station located within the Firth Rixson site on Sheffield Road, Templeborough, near Rotherham. The installation is located in a predominantly industrial area, the nearest residential properties are approximately 600 metres to the north, with Rotherham Town Centre approximately 1.5 km to the east.

The facility consists of a single Solid Biomass Plant which will burn waste to produce steam. The waste consists of recycled waste wood. In total, the Plant is designed to burn up to 270,000 tonnes of waste per annum, with a maximum of 320,000 tonnes, depending on the operating hours and the calorific value of the waste. The steam produced will be used to generate about 44.1 MWe. The majority of the electricity generated (about 40.1 MWe) will be exported to the National Grid with the remainder used to power the Plant.

The following operations are included within the scope of this variation notice:

- combustion of fuel in a combined heat and power-ready (CHP-R) Plant
- reception, transfer and storage of waste wood;
- steam turbine operation and the generation and export of electrical energy;
- cooling and condensing of the exhaust steam in water cooled condensers;
- storage, pH control and discharge of process effluent; and
- storage and handling of process residues extracted from biomass fuel streams

The main pollutants from the co-incinerator will be gaseous combustion products. Emissions from the co-incinerator are controlled to the IED Chapter IV standards. Combustion gases are cleaned before they are emitted via a 60-metre high stack. The abatement techniques used for cleaning the gases are:

- Selective Non-Catalytic Reduction (SNCR) where ammonia is injected into the gas stream to reduce oxides of nitrogen release

- Lime is injected to neutralise acid gases
- Activated carbon injection to remove heavy metals, dioxins and furans
- Fabric filters to remove particulates

Emissions from the stack are monitored in accordance with permit requirements and for process control purposes.

There will be no process discharges to controlled waters. Uncontaminated site surface water run-off arising from rain will be discharged to the River Don after passing through oil interceptors.

Main waste streams include the boiler and cooling tower blow down to sewer and ash residues from the boiler and flue gas cleaning. Ash is subject to testing to determine physical and chemical properties and pollution potential prior to determining the appropriate use. All wastes will be managed in a way which prevents their accidental release and enable recycling as much as practicable.

An Environmental Management System (EMS) will be in place prior to the commencement of commercial operation.

There are no internationally designated ecological sites within the relevant distance criteria of the Installation. There is one Site of Special Scientific Interest (Bradgate Brickworks) and two non-statutory sites with 2 km of the Installation. Assessment by the Environment Agency shows that emissions from the Installation are unlikely to have an adverse impact on interest features of the ecological sites.

The schedules specify the changes made to the permit.

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

Status log of the permit		
Description	Date	Comments
Application EPR/QP3932KK/A001	Duly made 24/08/10	Application for a waste co-incineration facility.
Schedule 5 notice issued	09/03/11	
Response to Schedule 5 notice received	21/03/11	
Permit determined EPR/QP3932KK	27/06/11	Permit issued to Brite Partnership.
Environment Agency-initiated variation EPR/QP3932KK/V002	05/03/14	Environment Agency-initiated variation to implement the changes introduced by the Industrial Emissions Directive (IED).
Application received EPR/GP3433WS/T001 (full transfer of permit EPR/QP3932KK)	Duly made 07/07/14	Application to transfer the permit in full from Brite Partnership to Brite Partnership (North East) Limited.
Transfer determined EPR/GP3433WS	18/07/14	Full transfer of the permit complete.
Application EPR/GP3433WS/V002 (variation and consolidation)	Duly made 18/08/14	Application to vary and update the permit to modern conditions.
Additional information received	25/09/14	Response to Schedule 5 notice on several aspects of the Application - energy consumption & global warming potential calculations, plant design details, human health risk assessment, nitrogen dioxide abatement system.
Additional information received	22/10/14	Clarification of emission limit values used in the air quality assessment report.

Status log of the permit		
Description	Date	Comments
Additional information received	06/11/14	Confirmation of feedstock and annual throughput for co-incinerator. Confirmation of discharge to sewer of all boiler and cooling towers blow down.
Additional information received	18/11/14	Clarification of aspects of the Application including pollutant background data, process contributions and design aspects of the co-incinerator.
Additional information received	26/11/14	Additional noise impact assessment data.
Additional information received	02/12/14	Revised site plan.
Variation determined EPR/GP3433WS (Billing ref:JP3333WL)	05/12/14	Varied and consolidated permit issued in modern condition format.

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

Permit number

EPR/GP3433WS

Issued to

Brite Partnership (North East) Limited (“the operator”)

whose registered office is

Suite 3

The Lindens

Pett Road

Pett

Hastings

East Sussex

TN35 4HD

company registration number 07239700

to operate a regulated facility at

Templeborough Biomass Energy Development

Firth Rixson Ickles Works

Sheffield Road

Rotherham

S60 1BN

to the extent set out in the schedules.

The notice shall take effect from 05/12/2014.

Name	Date
Thomas Ruffell	05/12/2014

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number

EPR/GP3433WS

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/GP3433WS/V002 authorising,

Brite Partnership (North East) Limited (“the operator”),

whose registered office is

Suite 3

The Lindens

Pett Road

Pett

Hastings

East Sussex

TN35 4HD

company registration number 07239700

to operate an installation at

Templeborough Biomass Energy Development

Firth Rixson Ickles Works

Sheffield Road

Rotherham

S60 1BN

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

Name	Date
Thomas Ruffell	05/12/2014

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

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

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

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

1.2 Energy efficiency

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is recovered with a high level of energy efficiency and energy is used efficiently in the activities.
- (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

1.3.1 The operator shall:

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

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

1.4.1 The operator shall take appropriate measures to ensure that:

- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
- (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").
- 2.1.2 Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table S2.2; and
 - (b) it conforms to the description in the documentation supplied by the producer and holder.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
 - (b) the composition of the waste;
 - (c) the handling requirements of the waste;
 - (d) the hazardous property associated with the waste, if applicable; and
 - (e) the waste code of the waste.
- 2.3.6 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.
- 2.3.7 Waste shall not be charged, or shall cease to be charged, if:
- (a) the combustion chamber temperature is below, or falls below, 850°C; or
 - (b) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than under abnormal operating conditions; or

(c) monitoring results required to demonstrate compliance with any continuous emission limit value in schedule 3 table S3.1 are unavailable other than under abnormal operating conditions.

2.3.8 The operator shall have at least one auxiliary burner in each line at start up or shut down or whenever the operating temperature falls below that specified in condition 2.3.7, as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.3.7 is maintained in the combustion chamber, such burner(s) may be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.

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

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

2.3.11 Where, during “abnormal operation”, on an incineration line any of the following situations arise, waste shall cease to be charged on that line until normal operation can be restored:

(a) continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1 due to disturbances or failures of the abatement systems, or continuous emission monitor(s) are out of service, as the case may be, for a total of 4 hours uninterrupted duration;

(b) the cumulative duration of “abnormal operation” periods over 1 calendar year has reached 60 hours on a co-incineration line;

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

(a) when the failed equipment is repaired and brought back into normal operation;

(b) when the operator initiates a shut-down of the waste combustion activity, as described in the application or as agreed in writing with the Environment Agency;

(c) when a period of four hours has elapsed from the start of the “abnormal operation”;

(d) when, in any calendar year, an aggregated period of 60 hours “abnormal operation” has been reached for a given incineration line.

2.3.13 Bottom ash and APC residues shall not be mixed.

2.4 Improvement programme

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

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

2.5 Pre-operational conditions

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

3 Emissions and monitoring

3.1 Emissions to water, air or land

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

- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.
- 3.1.4 Wastes produced at the site shall, as a minimum, be sampled and analysed in accordance with schedule 3 table S3.5. Additional samples shall be taken and tested and appropriate action taken, whenever:
- (a) disposal or recovery routes change; or
 - (b) it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
 - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 Noise and vibration

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

3.4.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Monitoring

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

- (a) point source emissions specified in tables S3.1, S3.2 and S3.3;
- (b) process monitoring specified in table S3.4;
- (c) residue quality specified in table S3.5

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

3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing by the Environment Agency. Newly installed CEMs, or CEMs replacing existing CEMs, shall have MCERTS certification and have an MCERTS certified range which is not greater than 1.5 times the daily emission limit value (ELV) specified in schedule 3 table S3.1. The CEM shall also be able to measure instantaneous values over the ranges which are to be expected during all operating conditions. If it is necessary to use more than one range setting of the CEM to achieve this requirement, the CEM shall be verified for monitoring supplementary, higher ranges.

3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.2, S3.3, S3.4 and S3.5 unless otherwise agreed in writing by the Environment Agency.

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

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

(i) Carbon monoxide	10%
(ii) Sulphur dioxide	20%
(iii) Oxides of nitrogen (NO & NO ₂ expressed as NO ₂)	20%
(iv) Particulate matter	30%
(v) Total organic carbon (TOC)	30%
(vi) Hydrogen chloride	40%
- (b) valid half-hourly average values shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals in condition 3.5.5(a);
- (c) where it is necessary to calibrate or maintain the monitor and this means that data are not available for a complete half-hour period, the half-hourly average shall in any case be considered valid if measurements are available for a minimum of 20 minutes during the half-hour period. The number of half-hourly averages so validated shall not exceed 5 per day;

- (d) daily average values shall be determined as the average of all the valid half-hourly average values within a calendar day. The daily average value shall be considered valid if no more than five half-hourly average values in any day have been determined not to be valid;
 - (e) no more than ten daily average values per year shall be determined not to be valid.
- 3.5.6 Continuous measurement systems on emission points from the installation shall be subject to quality control by means of parallel measurements with reference methods at least once every calendar year.

3.6 Pests

- 3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.6.2 The operator shall:
- (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
 - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

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

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
 - (b) the annual production/treatment data set out in schedule 4 table S4.2; and
 - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule; and
 - (d) the functioning and monitoring of the co-incineration plant in a format agreed with the Environment Agency. The report shall, as a minimum requirement (as required by Chapter IV of the Industrial Emissions Directive) give an account of the running of the process and the emissions into air and water compared with the emission standards in the IED.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
 - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
 - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.
- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.3 Notifications

- 4.3.1 In the event:
- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
 - (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
 - (b) of a breach of any permit condition the operator must immediately—
 - (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
 - (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i) or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

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

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

Where the operator is a registered company:

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

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

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

In any other case:

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

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

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

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

4.4 Interpretation

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

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

Schedule 1 – Operations

Table S1.1 activities		
Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex IIA and IIB operations	Limits of specified activity and waste types
S5.1 A(1) (b)	The co-incineration of non hazardous waste in a waste co-incineration plant with a capacity exceeding 3 tonnes per hour.	<p>From receipt of waste to emission of exhaust gas and disposal of waste arising.</p> <p>The co-incineration of non-hazardous waste including the operation of incineration line, boiler and auxiliary burners; facilities for the treatment of exhaust gases; on-site facilities for handling, treatment and storage of residues, surface water and waste water; systems for controlling and monitoring incineration operations and receipt, storage and handling of wastes and raw materials (including fuels).</p> <p>Waste types and quantities as specified in Table S2.2 of this permit.</p>
Directly Associated Activity		
Electricity generation	Electricity generation of about 44.1 MWe electrical power in a steam turbine from energy recovered from the flue gases.	The generation of electricity for export to the grid and for on-site operations.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Variation Application EPR/GP3433WS/V002	Supporting Information dated 11 August 2014.	18/08/14
Additional information	Response to Schedule 5 notice dated 19/09/14 (questions 3 and 6 detailing plant annual throughput, operating hours and nitrogen dioxide abatement)	25/09/14
Additional information	Confirmation of feedstock and annual waste throughput for co-incinerator. Confirmation of discharge to sewer of all boiler and cooling towers blow down.	06/11/14
Additional information	Clarification of aspects of the design aspects of the co-incinerator.	18/11/14
Additional information	Revised site plan.	02/12/14
Response to pre-operational condition PO2	Waste acceptance procedures agreed and approved in writing by the Environment Agency.	Date of approval

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>The operator shall submit a written proposal to the Environment Agency to carry out tests to determine the size distribution of the particulate matter in the exhaust gas emissions to air from emission point A1, identifying the fractions within the PM₁₀ and PM_{2.5} ranges. The proposal shall include a timetable for approval by the Environment Agency to carry out such tests and produce a report on the results.</p> <p>On receipt of written agreement by the Environment Agency to the proposal and timetable, the operator shall carry out the tests and submit to the Environment Agency a report on the results.</p>	Within 6 months of the completion of commissioning.
IC2	<p>The operator shall submit a written proposal to the Environment Agency on the commissioning of the installation. The report shall summarise the environmental performance of the plant as installed against the design parameters set out in the Application. The report shall also include a review of the performance of the facility against the conditions of the permit and details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions.</p>	Within 4 months of the completion of commissioning.
IC3	<p>The operator shall carry out checks to verify the residence time, minimum temperature and oxygen content of the exhaust gases in the furnace of the Solid Biomass Plant, whilst operating under the anticipated “most unfavourable” operating conditions. The results shall be submitted in writing to the Environment Agency.</p>	Within 4 months of the completion of commissioning.
IC4	<p>The operator shall carry out an assessment of the impact of emissions to air of VOCs, Cd, Tl, Hg, Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V and Chromium VI subject to emission limit values. A report on the assessment shall be submitted to the Environment Agency.</p> <p>Emissions monitoring data obtained during the first year of operation shall be used to compare the actual emissions with those assumed in the impact assessment submitted with the Application. The assessment shall predict the impact of each pollutant against the relevant EQS/EAL. In the event that the assessment shows that an EQS/EAL can be exceeded, the report shall include proposals for further investigative work.</p>	15 months from commencement of site operations.
IC5	<p>The operator shall submit a written report to the Environment Agency on the implementation of its Environmental Management System (EMS) and the progress made in the accreditation of the system by an external body or if appropriate submit a schedule by which the EMS will be subject to accreditation.</p>	Within 12 months of the date on which waste is first burnt.
IC6	<p>The operator shall carry out the first review on energy recovery and efficiency as required by condition 1.2.1 (b) of the Permit no later than 2 years from the date on which waste is first burnt. A report on this review shall be submitted to the Environment Agency.</p>	Within 2 years of the date on which waste is first burnt.
IC7	<p>The operator shall verify that the plant once operational conforms with the design specification for noise, i.e. that the noise levels shall not exceed 80 dB as measured 1 metre from the biomass buildings. Where noise levels are shown to exceed this level, the report shall include an action plan to reduce noise levels to the design specification set out in the Application.</p>	Within 3 months of the date on which waste is first burnt.
IC8	<p>The operator shall submit a written report to the Environment Agency describing the performance and optimisation of the selective non-catalytic reduction (SNCR) system and combustion settings to minimise oxides of nitrogen (NO_x) emissions within the emission limit values described in this Permit, with the minimisation of ammonia and nitrous oxide emissions.</p> <p>The report shall include an assessment of the level of NO_x, NH₃ and N₂O emissions that can be achieved under the optimum operating conditions.</p> <p>The report shall also provide details of the optimisation (including dosing rates) for the control of acid gases and dioxins.</p>	Within 4 months of the completion of commissioning.

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC9	The operator shall update the air dispersion modelling submitted with the Application for nitrogen dioxide based on actual emissions monitoring data recorded during the first year of operation. A report on the assessment shall be made to the Environment Agency.	15 months from commencement of site operations.
IC10	The operator shall submit a written summary report to the Environment Agency to confirm the results of the calibration and verification testing that the performance of the Continuous Emission Monitors for parameters as specified in Table S3.1 complies with the requirements of BS EN 14181, specifically the requirements of QAL1, QAL2 and QAL3.	Initial calibration to be submitted to the Environment Agency within 3 months of the completion of commissioning. Full summary evidence compliance report to be submitted within 18 months of commissioning.

Table S1.4 Pre-operational measures	
Reference	Pre-operational measures
PO1	Prior to the commencement of commissioning, the operator shall send a summary of the site Environmental Management System (EMS) to the Environment Agency and make available for inspection all documents and procedures which form part of the EMS. The EMS shall be developed in line with the requirements set out in the Environment Agency Guidance Document, <i>How to Comply with your Environmental Permit</i> . The documents and procedures set out in the EMS shall form the written management system referenced in condition 1.1.1 (a) of the Permit.
PO2	Prior to the commencement of commissioning, the operator shall submit a written report to the Environment Agency, detailing the waste acceptance procedures to be used at the site. The waste acceptance procedures shall include the process and systems by which wastes unsuitable for co-incineration at the site will be controlled. The procedures shall be implemented in accordance with the written approval from the Environment Agency.
PO3	Prior to the commencement of commissioning, the operator shall submit to the Environment Agency, a protocol for the sampling and testing of incinerator bottom ash for the purposes of assessing its hazard status. Sampling and testing shall be carried out in accordance with the protocol as approved by the Environment Agency.
PO4	Prior to the commencement of commissioning, the operator shall submit a written report to the Environment Agency, setting out plans detailing the location of the drainage system within the Installation boundary, along with any associated discharge points to surface water or sewer. The report shall describe how the measures comply with the relevant Environment Agency Guidance.
PO5	Prior to the commencement of commissioning, the operator shall provide a written commissioning plan, including timescales for completion, for approval by the Environment Agency. The commissioning plan shall include the expected emissions to the environment during the different stages of commissioning, the expected durations of commissioning activities and the actions to be taken to protect the environment and report to the Environment Agency in the event that actual emissions exceed expected

Table S1.4 Pre-operational measures	
Reference	Pre-operational measures
	emissions. Commissioning shall be carried out in accordance with the commissioning plan as approved.
PO6	After completion of furnace design and at least three calendar months before any furnace operation, the operator shall submit a written report to the Environment Agency of the details of the computational fluid dynamic (CFD) modelling. The report shall demonstrate whether the design combustion conditions comply with the residence time and temperature requirements as defined by the Industrial Emissions Directive (IED).

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Gas oil	Sulphur content to be in compliance with the Sulphur Content of Liquid Fuels Regulations

Table S2.2 Permitted waste types and quantities for co-incineration	
Maximum quantity	The maximum quantity of all waste types to be co-incinerated at the Solid Biomass Plant shall not exceed 320,000 tonnes per year.
Waste code	Description
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 07	wastes from forestry
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 01	wastes from wood processing and the production of panels and furniture
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	wastes from pulp, paper and cardboard production and processing
03 03 01	waste bark and wood
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 03	wooden packaging
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 02	wood, glass and plastic
17 02 01	wood
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 05	wastes from aerobic treatment of solid wastes
19 05 03	off-specification compost
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 07	wood other than that mentioned in 19 12 06
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 38	wood other than that mentioned in 20 01 37

Schedule 3 – Emissions and monitoring

Emission point ref. & location	Parameter	Source	Limit (including unit) [Note 1]	Reference period	Monitoring frequency	Monitoring standard or method
A1	Particulate matter	Solid Biomass Plant	10 mg/m ³	daily average	Continuous measurement	BS EN 14181
A1	Total Organic Carbon (TOC)	Solid Biomass Plant	10 mg/m ³	daily average	Continuous measurement	BS EN 14181
A1	Hydrogen chloride	Solid Biomass Plant	10 mg/m ³	daily average	Continuous measurement	BS EN 14181
A1	Hydrogen fluoride	Solid Biomass Plant	2 mg/m ³	periodic over minimum 1-hour period	Quarterly in first year, then bi-annual	BS ISO 15713
A1	Carbon monoxide	Solid Biomass Plant	50 mg/m ³	daily average	Continuous measurement	BS EN 14181
A1	Sulphur dioxide	Solid Biomass Plant	50 mg/m ³	daily average	Continuous measurement	BS EN 14181
A1	Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	Solid Biomass Plant	180 mg/m ³	daily average	Continuous measurement	BS EN 14181
A1	Cadmium & thallium and their compounds (total)	Solid Biomass Plant	0.033 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year, then bi-annual	BS EN 14385
A1	Mercury and its compounds	Solid Biomass Plant	0.033 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year, then bi-annual	BS EN 13211
A1	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)	Solid Biomass Plant	0.33 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year, then bi-annual	BS EN 14385
A1	Ammonia (NH ₃)	Solid Biomass Plant	No limit set	periodic over minimum 1 hour period	Quarterly in first year, then bi-annual	BS EN 14181
A1	Nitrous oxide (N ₂ O)	Solid Biomass Plant	No limit set	Periodic over minimum 1 hour period	Quarterly in first year, then bi-annual	VDI 2469-1 or VDI 2469-2

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (including unit) [Note 1]	Reference period	Monitoring frequency	Monitoring standard or method
A1	Dioxins / furans (I-TEQ)	Solid Biomass Plant	0.066 ng/m ³	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year, then bi-annual	BS EN 1948 Parts 1, 2 and 3
A1	Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	Solid Biomass Plant	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year, then bi-annual	BS EN 1948-4
A1	Dioxin-like PCBs (WHO-TEQ Fish)	Solid Biomass Plant	No limit set	periodic over minimum 6 hours, maximum 8 hour period.	Quarterly in first year, then bi-annual	BS EN 1948-4
A1	Dioxin-like PCBs (WHO-TEQ Birds)	Solid Biomass Plant	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year, then bi-annual	BS EN 1948-4
A1	Dioxins / furans (WHO-TEQ Humans / Mammals)	Solid Biomass Plant	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year, then bi-annual	BS EN 1948 Parts 1, 2 and 3
A1	Dioxins / furans (WHO-TEQ Fish)	Solid Biomass Plant	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year, then bi-annual	BS EN 1948 Parts 1, 2 and 3
A1	Dioxins / furans (WHO-TEQ Birds)	Solid Biomass Plant	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year, then bi-annual	BS EN 1948 Parts 1, 2 and 3
A1	Specific individual polycyclic aromatic hydrocarbons (PAHs), as specified in Schedule 6.	Solid Biomass Plant	No limit set	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year, then bi-annual	BS ISO 11338-1 and 2

Note 1 – Reference conditions are the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry.

Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 on site plan in schedule 7 emission to River Don	No parameter set	Uncontaminated site surface water	No limit set	--	Weekly	No visible oil or grease
W2 on site plan in schedule 7 emission to River Don	No parameter set	Uncontaminated site surface water	No limit set	--	Weekly	No visible oil or grease

Emission point ref. & location	Parameter	Source	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1	Flow	Boiler and Cooling Tower Blow Down	No limit set	Daily m ³ /day	Continuous	--
	pH			--	Continuous	--
	Temperature			--	Continuous	--

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Installation	Wind Speed and Direction	Continuous	Anemometer	As agreed in writing with the Environment Agency
Location close to the Combustion Chamber inner wall	Temperature (°C)	Continuous	Traceable to National Standards	As agreed in writing with the Environment Agency
A1	Exhaust gas temperature	Continuous	Traceable to National Standards	As agreed in writing with the Environment Agency
A1	Exhaust gas pressure	Continuous	Traceable to National Standards	As agreed in writing with the Environment Agency
A1	Exhaust gas oxygen content	Continuous	BS EN 15267-3 BS EN 14181	--
A1	Exhaust gas water vapour content	Continuous	BS EN 15267-3 BS EN	--

Table S3.5 Residue quality					
Emission point reference or source or description of point of measurement	Parameter	Limit	Monitoring frequency	Monitoring standard or method	Other specifications
Bottom Ash	LOI	<5%	Monthly in the first year of operation. Then Quarterly	Environment Agency ash sampling protocol.	--
Bottom Ash	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	None set	Monthly in the first year of operation. Then Quarterly	Sampling and analysis as per Environment Agency ash sampling protocol.	--
Bottom Ash	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	None set	Before use of a new disposal or recycling route	Sampling and analysis as per Environment Agency ash sampling protocol.	--
APC Residues	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	None set	Monthly in the first year of operation. Then Quarterly	Sampling and analysis as per Environment Agency ash sampling protocol.	--
APC Residues	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	None set	Before use of a new disposal or recycling route	Sampling and analysis as per Environment Agency ash sampling protocol.	--

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1	A1	Every 3 months	1 January, 1 April, 1 July, 1 October
Emissions to sewer Parameters as required by condition 3.5.1	S1	Every 6 months	1 January, 1 July
TOC or LOI Parameters as required by condition 3.5.1	Bottom Ash	Every 3 months but monthly for the first year of operation	1 January, 1 April, 1 July, 1 October
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.5.1	Bottom Ash	Every 3 months but monthly for the first year of operation	1 January, 1 April, 1 July, 1 October
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.5.1	Bottom Ash	Before use of a new disposal or recycling route	From the first date waste is first burnt
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.5.1	APC Residues	Every 3 months but monthly for the first year of operation	1 January, 1 April, 1 July, 1 October
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.5.1	APC Residues	Before use of a new disposal or recycling route	From the first date waste is first burnt
Functioning and monitoring of the incineration plant as required by condition 4.2.2	--	Every 12 months	1 January

Table S4.2 Annual production/treatment	
Parameter	Units
Total waste wood burnt at the Solid Biomass Plant	tonnes
Total support fuel burnt at the Solid Biomass Plant	tonnes
Electrical energy produced	MWh
Electrical energy exported	MWh
Electrical energy used on installation	MWh
Electrical energy drawn from the Grid	MWh
Total Bottom Ash produced	tonnes
Total APC produced	tonnes

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Electrical energy imported to site	Quarterly	MWh / tonne of waste wood co-incinerated (dry basis)
Fuel oil consumption	Quarterly	kg / tonne of waste wood co-incinerated (dry basis)
Mass of Bottom Ash produced	Quarterly	kg / tonne of waste wood co-incinerated (dry basis)
Mass of APC residues produced	Quarterly	kg / tonne of waste wood co-incinerated (dry basis)
Mass of Other solid residues produced	Quarterly	kg / tonne of waste wood co-incinerated (dry basis)
Ammonia consumption	Quarterly	kg / tonne of waste wood co-incinerated (dry basis)
Activated Carbon consumption	Quarterly	kg / tonne of waste wood co-incinerated (dry basis)
Lime consumption	Quarterly	kg / tonne of waste wood co-incinerated (dry basis)
Water consumption	Quarterly	kg / tonne of waste wood co-incinerated (dry basis)
Periods of abnormal operation	Quarterly	No of occasions and cumulative hours for current calendar year

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Environment Agency	05/12/14
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	05/12/14
Residues	Form residues 1 or other form as agreed in writing by the Environment Agency	05/12/14
Energy usage and other performance indicators	Form Performance 1 or other form as agreed in writing by the Environment Agency	05/12/14

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Annual performance reporting	Form Annual Performance 1 and 2 or other form as agreed in writing by the Environment Agency	05/12/14

Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

Part A

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

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

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

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

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

Part B – to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

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

“abnormal operation” means any technically unavoidable stoppages, disturbances, or failures of the abatement plant or the measurement devices [other than continuous emission monitors for releases to air of particulates, TOC and/or CO], during which the concentrations in the discharges into air and the purified waste water of the regulated substances may exceed the normal emission limit values.

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

“APC residues” means air pollution control residues

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

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

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

“bottom ash” means ash falling through the grate.

“CEM” Continuous emission monitor

“CEN” means Comité Européen de Normalisation

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

“daily average” for releases of substances to air means the average of valid half-hourly averages over a calendar day during normal operation.

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

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

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

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

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

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

“ISO” means International Standards Organisation.

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

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

“PAH” means Poly-cyclic aromatic hydrocarbon, and comprises Anthanthrene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[b]naph(2,1-d)thiophene, Benzo[c]phenanthrene,

Benzo[ghi]perylene, Benzo[a]pyrene, Cholanthrene, Chrysene, Cyclopenta[c,d]pyrene, Dibenzo[ah]anthracene, Dibenzo[a,i]pyrene Fluoranthene, Indo[1,2,3-cd]pyrene, Naphthalene

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

“pests” means Birds, Vermin and Insects.

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

“quarterly” for reporting/sampling means after/during each 3 month period, January to March; April to June; July to September and October to December and, when sampling, with at least 2 months between each sampling date.

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

“shut down” is any period where the plant is being returned to a non-operational state and there is no waste or biomass fuel being burned as described in the application or agreed in writing with the Environment Agency.

“start up” is any period, where the plant has been non-operational, after igniting the auxiliary burner until waste or biomass fuel has been fed to the plant to initiate steady-state conditions.

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

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

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

“year” means calendar year ending 31 December.

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

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means in relation to gases from co-incineration plants, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 6% dry.

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

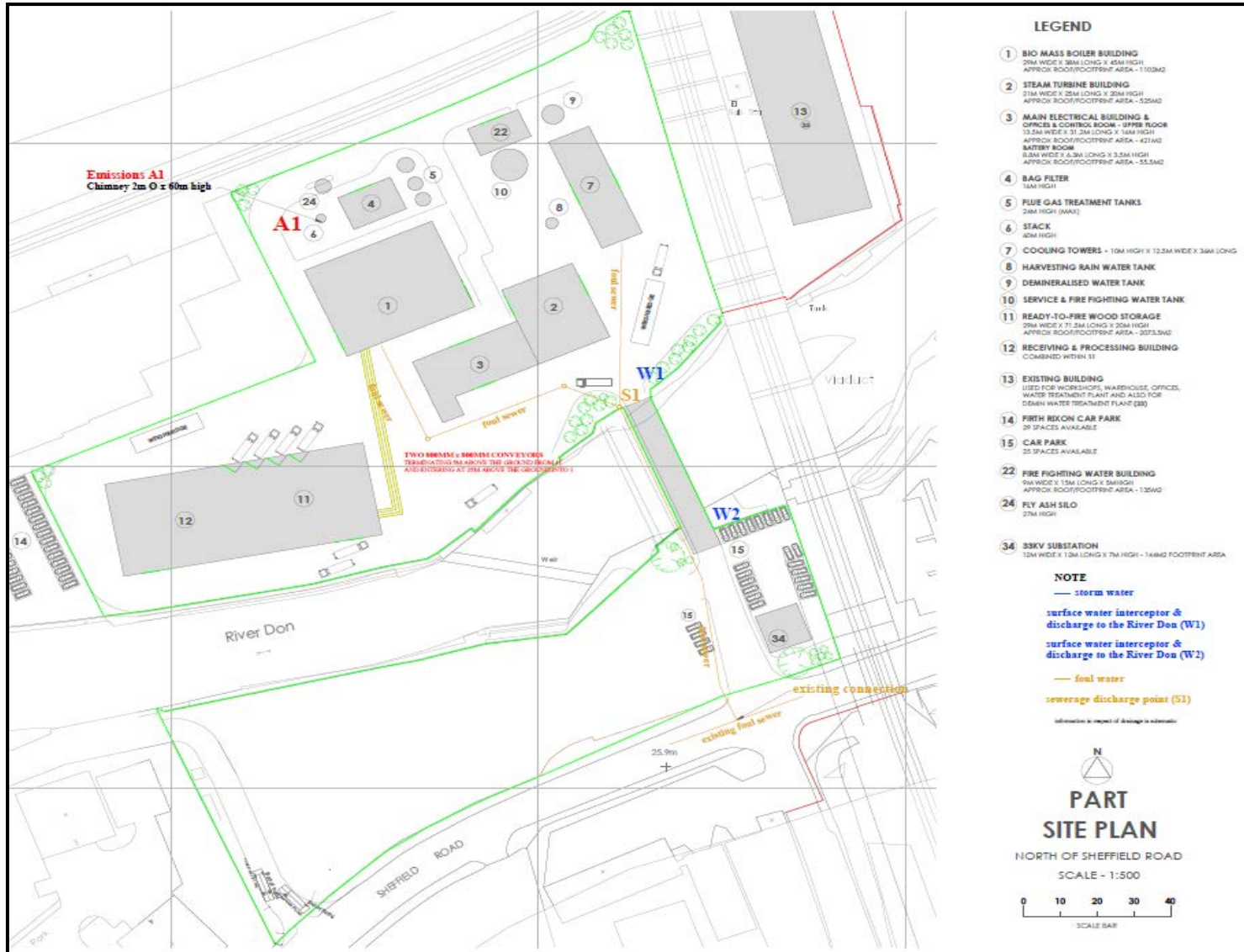
TEF schemes for dioxins and furans				
Congener	I-TEF(1990)	WHO-TEF (1997/8)		
		Humans / Mammals	Fish	Birds
Dioxins				
2,3,7,8-TCDD	1	1	1	1
1,2,3,7,8-PeCDD	0.5	1	1	1

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

TEF schemes for dioxin-like PCBs			
Congener	WHO-TEF (1997/8)		
	Humans / mammals	Fish	Birds
Non-ortho PCBs			
3,4,4',5-TCB (81)	0.0001	0.0005	0.1
3,3',4,4'-TCB (77)	0.0001	0.0001	0.05
3,3',4,4',5 - PeCB (126)	0.1	0.005	0.1
3,3',4,4',5,5'-HxCB(169)	0.01	0.00005	0.001
Mono-ortho PCBs			
2,3,3',4,4'-PeCB (105)	0.0001	<0.000005	0.0001
2,3,4,4',5-PeCB (114)	0.0005	<0.000005	0.0001
2,3',4,4',5-PeCB (118)	0.0001	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.0001	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.0005	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.0005	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00001	<0.000005	0.00001

TEF schemes for dioxin-like PCBs			
Congener	WHO-TEF (1997/8)		
	Humans / mammals	Fish	Birds
2,3,3',4,4',5,5'-HpCB (189)	0.0001	<0.000005	0.00001

Schedule 7 – Site plan



END OF NOTICE.