

SLOUGH MULTIFUEL EXTENSION PROJECT

Planning Inspectorate Ref: EN010129

The Slough Multifuel Extension Order

Land at 342 Edinburgh Avenue, Slough Trading Estate, Slough

Document Ref: 7.13 - Environmental Permit

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure)

Regulations 2009 – Regulation 5(2)(q)



Applicant: SSE Slough Multifuel Limited

September 2022

Notice of transfer and variation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

KEADBY GENERATION LIMITED

Slough Multifuel Facility
342 Edinburgh Avenue
Slough Trading Estate
Berkshire
SL1 4TU

Transfer application number

EPR/CP3031SX/T006

Permit number

EPR/KP3702MY

Slough Multifuel Facility

Permit number EPR/KP3702MY

Introductory note

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

The following notice gives notice of the transfer in part and variation of an environmental permit to a new operator (the transferee).

Keadby Generation Limited generate electricity for input to both the Slough Trading Estate and the National Grid with excess heat supplying steam and hot water to local customers on the trading estate. The site is predominantly flat and approximately 32m above ordinance datum.

The installation is located on the Slough Trading Estate, Slough, Berkshire. The site covers an area of approximately 5 hectares and is approximately centred on National Grid Reference SU9538981483. The site is mainly located on the south side of Edinburgh Avenue and is occupied by several buildings and facilities which form the installation including: incineration and combustion activities, condensate treatment, raw material storage and maintenance. There is a natural draught cooling tower occupying an area on the opposite northern side of Edinburgh Avenue.

This part transfer covered the transfer of the Multi Fuel incineration lines to Keadby Generation Limited.

The Multi Fuel Facility (MFF) has a maximum design capacity of 480,000 tonnes per annum consisting of two lines. The boiler capacity of the Multifuel Facility is 91.5MWth. The combustion gases will be treated in a flue gas treatment (FGT) plant prior to being discharged via a single stack (with two flues) ('South Stack'). The stack will be 90m tall to allow appropriate dispersion of the treated flue gas.

Any changes made as a result of the part transfer and variation are set out in Schedule 1.

We consider that in reaching our decision to transfer and vary the permit we have taken into account all relevant considerations and legal requirements. We are satisfied that the permit will ensure that a high level of protection is provided for the environment and human health and that the activities will not give rise to any significant pollution of the environment or harm to human health.

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/CP3031SX	Duly made 18/04/2006	
Additional Information Received	14/08/2006	
Request to extend determination	15/08/2006	Received 18/08/2006
Request to extend determination	29/11/2006	Received 01/12/2006
Permit determined	21/12/2006	
Variation application EPR/CP3031SX/V002	Duly made 13/04/2011	Application to replace boiler 16 with a 40 MW, thermal input natural gas fired boiler
Variation determined EPR/CP3031SX/V002	27/06/2011	Varied permit issued.
Application EPR/CP3031SX/V003 (variation and consolidation)	Duly made 14/04/2015	Application to vary the permit to remove old incineration lines CFB1 and CFB2 and the Fibre Fuel Plant and add two new incineration lines referred to as the Multi-fuel Facility.

Status log of the permit		
Description	Date	Comments
Schedule 5 request (dated 26/06/2015)	Received 06/08/2015	Clarification of details relating to waste fuel storage periods, waste code description, firewater quantity, standby generator, plant efficiency, waste firing diagram and dust suppression.
Additional Information	28/08/2015	Flue gas treatment location, Green house gas assessment report, confirmation of some source segregated waste streams.
Additional Information	30/09/2015	Boiler thermal input, fibre fuel plant removal and gas oil storage.
Additional Information	15/02/2016	Clarification on short term CO limits, clarification on 800°C temperature trigger on B17 gas burners.
Additional Information	13/05/2016	Clarification on operator's waste derived fuel (WDF) terminology.
Variation determined EPR/KP3702MY/V003	14/07/2016	Varied permit issued.
Notified of change of company registered address	22/09/2017	Registered Office changed to No.1 Forbury Place, 43 Forbury Road, Reading, RG1 3JH.
Variation Issued (EPR/CP3031SX/V004)	12/10/2017	Varied permit issued to Slough Heat & Power Limited.
Application EPR/CP3031SX/V005 (variation and consolidation)	Duly made 28/04/2020	Application to vary the permit to increase the throughput to the Multifuel facility to 480,000 tonnes.
Variation determined EPR/KP3702MY/V005	26/10/2020	Varied permit issued.
Application EPR/CP3031SX/T006 (part transfer of permit EPR/CP3031SX)	Duly made 12/11/2021	Application to transfer incineration facility to KEADBY GENERATION LIMITED.
Transfer and variation determined EPR/KP3702MY (new and varied permit issued)	25/03/2022	Transfer of incineration facility complete.

End of introductory note

Notice of transfer

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 and 21 of the Environmental Permitting (England and Wales) Regulations 2016 transfers part of and varies.

Permit number

EPR/CP3031SX

to

KEADBY GENERATION LIMITED (“the operator”)

whose registered office is

Keadby Power Station

Trentside

Keadby

Scunthorpe

DN17 3EF

company registration number 02729513

to operate a regulated facility at

Slough Multifuel Facility

342 Edinburgh Avenue

Slough Trading Estate

Berkshire

SL1 4TU

from **Slough Heat and Power Limited**

to the extent set out in the schedules.

This notice shall take effect from 25/03/2022

**The number of the new permit granted to KEADBY GENERATION LIMITED is
EPR/KP3702MY**

Name	Date
Claire Roberts	25/03/2022

Authorised on behalf of the Environment Agency

Schedule 1 – changes to the permit

All conditions have been varied by the consolidated permit EPR/KP3702MY

Schedule 2 – new permit

New permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/KP3702MY

This is the consolidated permit referred to in the notice for transfer application EPR/CP3031SX/T006 authorising,

KEADBY GENERATION LIMITED (“the operator”),

whose registered office is

**Keadby Power Station
Trentside
Keadby
Scunthorpe
DN17 3EF**

company registration number 02729513

to operate an installation at

**Slough Multifuel Facility
342 Edinburgh Avenue
Slough Trading Estate
Berkshire
SL1 4TU**

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

Name	Date
Claire Roberts	25/03/2022

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”).

2.2 The site

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

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table S2.2; and
 - (b) it conforms to the description in the documentation supplied by the producer or holder; and
 - (c) it having been separately collected for recycling, it is subsequently unsuitable for recovery by recycling.
- 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 of Multifuel facility lines Boiler 18 and Boiler 19 is below, or falls below, 850°C; or
 - (b) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded; or

- (c) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than under abnormal operating conditions; or
 - (d) 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;
 - (c) continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1 (a) due to disturbances or failures of the abatement systems;
 - (d) continuous emission monitors or alternative techniques to demonstrate compliance with the emission limit value(s) for particulates, TOC and / or CO in schedule 3 table S3.1(a), as agreed in writing with the Environment Agency, are unavailable.
- 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.
- 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 except in “abnormal operation”, when 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(a), S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Wastes produced at the site shall, as a minimum, be sampled and analysed in accordance with schedule 3 table S 3.5 Additional samples shall be taken and tested and appropriate action taken, whenever:
- (a) disposal or recovery routes change; or
 - (b) it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

3.2 Emissions 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.
- 3.2.4 The Operator shall carry out monitoring of soil and groundwater in accordance with IED articles 14(1)(b), 14(1)(e) and 16(2) to the protocol agreed in writing with the Environment Agency under IC25.

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, S3.1(a) S3.2 and S3.3;
- (b) process monitoring specified in table S3.4;
- (c) residue quality 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, S3.1(a) S3.2 and S3.3 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:
 - Carbon monoxide 10%

- Sulphur dioxide 20%
 - Oxides of nitrogen (NO & NO₂ expressed as NO₂) 20%
 - Particulate matter 30%
 - Total organic carbon (TOC) 30%
 - Hydrogen chloride 40%
- (b) valid half-hourly average values or 10-minute averages shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals in condition 3.5.5 (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 or 10-minute average shall in any case be considered valid if measurements are available for a minimum of 20 minutes or 7 minutes during the half-hour or 10-minute period respectively. The number of half-hourly or 10-minute averages so validated shall not exceed 5 or 15 respectively per day;
- (d) daily average values shall be determined as the average of all the valid half-hourly average or 10-minute average values within a calendar day. The daily average value shall be considered valid if no more than five half-hourly average or 15 10-minute average values in any day have been determined not to be valid;
- (e) no more than ten daily average values per year shall be determined not to be valid.

3.6 Fire prevention

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

3.6.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
- (b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

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

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

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

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 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;
 - (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 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.

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

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

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

4.4 Interpretation

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

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

Schedule 1 – Operations

Table S1.1 activities			
Activity Reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A1	S5.1 A1 (b) The incineration of non-hazardous waste in a waste incineration plant or waste co-incineration plant with a capacity exceeding 3 tonnes per hour	Multifuel Facility Boiler 18 (B18) line with a thermal input capacity of 91.5MW	The incineration of non-hazardous waste including the operation of incineration lines B18 and B19, boilers and auxiliary burners; facilities for the treatment of exhaust gases; on-site facilities for 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). Waste types and quantities as specified in table S2.2 of this permit.
		Multifuel Facility Boiler 19 (B19) line with a thermal input capacity of 91.5MW	
Directly Associated Activity			
A2	Electricity Generation	Steam turbine generator; 1 x 50 MW Electrical (T18)	From receipt of steam from steam mains to the export of electricity to Slough trading estate and the National Grid.
A3	Standby Generators	Two enclosed 5MWe standby generators with integral fuel storage.	Used for safe shutdown of the plant in the event of a loss of power and incorporating regular weekly testing to ensure integrity of operation.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to section 2.1 and 2.2 in the application.	31/03/2006
Receipt of additional information to the application EPR/CP3031SX/A001	Response to the request for information with regards to: air emissions abatement, discharge points to water, sewer and groundwater, borehole locations, improvements to the storage of acid and caustic, level indication and tank high level alarms, tank 3 and associated underground pipe work, boiler blow down, use of drain covers, replacement of existing CEMs for CFB1, CFB2 and B17, definition of start-up and shutdown, point source monitoring requirements for co-incinerators, monitoring and reporting emissions to sewer, pollution prevention measures for surface water discharges, NO _x control from the gas turbine, operation of the gas turbine in open cycle. Storage of potentially dusty materials, clearing of surface water drains and the oil drum storage area.	14/08/2006
Variation Application EPR/CP3031SX/V002	Application Document 2, Section 2.4 Function of the Package Boiler, Application Document 4, Sections 4.3 Environmental Impact Assessment, Section 4.4 Energy Efficiency, Section 4.5 Energy Efficiency and Section 4.6 Waste Minimisation	13/04/2011
Email receipt of further information	Response regarding the decommissioning of Boiler 15 upon successful commissioning of the Package Boiler	09/06/2011
Application for variation EPR/CP3031SX/V003	The response to section C3 in the application and supporting documentation.	14/04/2015
Response to Schedule 5 Notice dated 26/06/15	Clarification of details relating to waste fuel storage periods, waste code description, firewater quantity, standby generator, plant efficiency, waste firing diagram and dust suppression.	06/08/2015
Additional Information	Flue gas treatment location, Green House Gas Assessment Report, confirmation of some source segregated waste streams.	28/08/2015
Additional Information	Boiler thermal input, fibre fuel plant removal and gas oil storage.	30/09/2015
Additional Information	Clarification on short term CO limits, clarification on 800°C temperature trigger on B17 gas burners.	15/02/2016
Additional Information	Clarification on operator's waste derived fuel (WDF) terminology.	13/05/2016
Variation Application EPR/CP3031SX/V005	Application forms C2 and C3 and referenced supporting information.	28/04/2020

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>For Multifuel facility lines Boiler 18 and Boiler 19, 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 South Stack Flue1 and 2, 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 the 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>For Multifuel facility lines Boiler 18 and Boiler 19, the Operator shall submit a written report 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 this 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>For Multifuel facility lines Boiler 18 and Boiler 19, the Operator shall carry out checks to verify the residence time, minimum temperature and oxygen content of the exhaust gases in the furnace whilst operating under the anticipated most unfavourable operating conditions. The results shall be submitted in writing to the Environment Agency.</p>	Within 4 months of the completion of commissioning.
IC4	<p>For Multifuel facility lines Boiler 18 and Boiler 19, 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 nitrous oxide emissions. The report shall include an assessment of the level of NO_x and N₂O emissions that can be achieved under 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.
IC5	<p>For Multifuel facility lines Boiler 18 and Boiler 19, the Operator shall carry out an assessment of the impact of emissions to air of the component metals subject to emission limit values. A report on the assessment shall be made 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. An assessment shall be made of the impact of each metal 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 operations

IC6	For Multifuel facility lines Boiler 18 and Boiler 19, the Operator shall submit a written summary report to the Environment Agency to confirm by the results of calibration and verification testing that the performance of Continuous Emission Monitors for parameters as specified in Table S4.1(b) complies with the requirements of BS EN 14181, specifically the requirements of QAL1, QAL2 and QAL3.	Initial calibration report to be submitted to the Environment Agency within 3 months of completion of commissioning. Full summary evidence compliance report to be submitted within 18 months of commissioning.
IC7	For Multifuel facility lines Boiler 18 and Boiler 19, the Operator shall provide written confirmation that the sound power of the proposed plant will not exceed those used in the noise modelling assessment. If the proposed plant exceeds the sound powers used in the assessment, the operator shall remodel to demonstrate this will not have an adverse impact at receptors.	Within 3 months of the completion of the final facility design.
IC8	On completion of the final design of the Multifuel facility lines Boiler 18 and Boiler 19 and any onsite building configuration changes from those proposed in the application, the operator shall carry out noise modelling on the impact at the same receptors identified in the application. If the impact is greater than the levels proposed in the application, alternative mitigation measures to offset any loss in screening effects shall be identified. The operator shall submit a written report to the Environment Agency for approval detailing the findings of the noise modelling carried out and a timetable for implementing the proposed mitigation measures.	Within 3 months of the completion of the final facility design.
IC9	The Operator shall provide an 'as built' site plan, clearly showing the locations of all emission points.	Within 4 months of the completion of commissioning of Multifuel Facility lines Boiler 18 and 19.
IC10	The Operator shall submit a report on the baseline conditions of soil and groundwater at the installation. The report shall contain the information necessary to determine the state of soil and groundwater contamination so as to make a quantified comparison with the state upon definitive cessation of activities provided for in Article 22(3) of the IED. The report shall contain information, supplementary to that already provided in application Site Condition Report, needed to meet the information requirements of Article 22(2) of the IED.	Within 4 months of the completion of commissioning of Multifuel Facility lines Boiler 18 and 19
IC11	The Operator shall submit a site plan showing the location of the site's anemometer for recording wind speed and direction.	1 week prior to commissioning of Multifuel Facility lines Boiler 18 and 19

IC12	<p>The operator shall revise the fire prevention plan to include the updates for the Multifuel Facility produced in line with the requirement of our fire prevention plan guidance (dated January 2020 or any later version) and submit the revision to the Environment Agency for approval.</p> <p>Once approved by the Environment Agency, the operator shall implement the measures outlined in the plan within the timescale agreed with the Environment Agency.</p>	3 months prior to the commissioning of the Multifuel Facility
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Table S1.4 Pre-operational measures	
Reference	Pre-operational measures
PO1	At least three months prior to the commissioning of the Multifuel facility lines Boiler 18 and Boiler 19 plant, the Operator shall submit a revised written odour management plan for approval by the Environment Agency. The plan shall as a minimum comply with the requirements set out in Horizontal Guidance: H4 Odour Management, How to Comply with your Environmental Permit.
PO2	Prior to the commencement of commissioning Multifuel facility lines Boiler 18 and Boiler 19, the Operator shall submit to the Environment Agency for approval, a protocol for the sampling and testing of incinerator bottom ash for the purposes of assessing its hazard status. Sampling and testing shall be carried out in accordance with the protocol as approved.
PO3	Prior to the commencement of commissioning Multifuel facility lines Boiler 18 and Boiler 19, the Operator shall provide a written commissioning plan, including timelines for completion, for approval by the Environment Agency. The commissioning plan shall include the expected emissions to the environment during the different stages of commissioning, the expected durations of commissioning activities and the actions to be taken to protect the environment and report to the Environment Agency in the event that actual emissions exceed expected emissions. Commissioning shall be carried out in accordance with the commissioning plan as approved.
PO4	After completion of furnace design and at least three calendar months before Multifuel facility lines Boiler 18 and Boiler 19 furnace commence operation, the operator shall submit a written report to the Environment Agency with 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 Chapter IV and Annex VI of the IED.
PO5	After completion of Multifuel facility lines Boiler 18 and Boiler 19 furnace design, the operator shall confirm if Flue Gas Recirculation (FGR) will be used in conjunction with Selective Non-Catalytic Reduction (SNCR) to reduce emissions of NOx. The operator shall submit a written a report to the Environment Agency for approval detailing the effectiveness of the measures to be used and a justification for the measures chosen.

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Gas oil	Less than 0.1% w/w sulphur content

Table S2.2 Permitted waste types and quantities for burning in the Multifuel Facility line Boiler 18 and Boiler 19.	
Maximum quantity	The annual throughput for the site shall not exceed 480,000 tonnes aggregated input to Boilers 18 and 19.
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 08	wastes from sorting of paper and cardboard destined for recycling
04	wastes from the leather, fur and textile industries
04 02	wastes from the textile industry
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
09	wastes from the photographic industry
09 01	wastes from the photographic industry
09 01 08	photographic film and paper free of silver or silver compounds
15	waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 05	composite packaging
15 01 06	mixed packaging
17	construction and demolition wastes (including excavated soil from contaminated sites)
17 02	wood, glass and plastic
17 02 01	wood

Table S2.2 Permitted waste types and quantities for burning in the Multifuel Facility line Boiler 18 and Boiler 19.	
Maximum quantity	The annual throughput for the site shall not exceed 480,000 tonnes aggregated input to Boilers 18 and 19.
Waste 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 01	paper and cardboard
19 12 04	plastic and rubber
19 12 07	wood other than mentioned in 19 12 06
19 12 08	textiles
19 12 10	combustible material (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 01	process waste from segregated clean sources of paper.
20 01 11	textiles
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	process waste from segregated clean sources of plastics.
20 03	other municipal wastes
20 03 01	mixed municipal waste (no black bag waste)

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard(s) or method(s)
South Stack flue 1,2 As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Multifuel facility Boiler 18 and Boiler 19	Total organic carbon (TOC) mg/m ³	10 mg/m ³	Daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Total Organic Carbon (TOC)	20 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Carbon monoxide	50 mg/m ³	Daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Carbon monoxide	150 mg/m ³	95% of all 10-minute averages in any 24-hour period	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Particulate matter	10 mg/m ³	Daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Particulate matter	30 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Hydrogen chloride	10 mg/m ³	Daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Hydrogen chloride	60 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Hydrogen fluoride	2 mg/m ³	periodic over minimum 1-hour period	Quarterly in first year. Then Bi-annual	BS ISO 15713
		Sulphur dioxide	50 mg/m ³	Daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard(s) or method(s)
		Sulphur dioxide	200 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	200 mg/m ³	Daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	400 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Cadmium & thallium and their compounds (total)	0.05 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 14385
		Mercury and its compounds	0.05 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 13211
		Antimony, Arsenic, Lead, Chromium, Cobalt, Copper, Manganese, Nickel, and vanadium and their compounds (total)	0.5 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 14385

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard(s) or method(s)
		Nitrous oxide (N ₂ O)	No Limit set	periodic over minimum 1-hour period	For periodic measurement, quarterly in the first year of operation, then bi-annual	BS EN ISO 21258
		Dioxins / furans (I-TEQ)	0.1 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
		Dioxins / furans (WHO-TEQ Humans / Mammals)	--	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948 Parts 1, 2 and 3
		Dioxins / furans (WHO-TEQ Fish)	--	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948 Parts 1, 2 and 3
		Dioxins / furans (WHO-TEQ Birds)	--	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948 Parts 1, 2 and 3
		Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	--	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948-4
		Dioxin-like PCBs (WHO-TEQ Fish)	--	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948-4
		Dioxin-like PCBs (WHO-TEQ Birds)	--	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948-4
		Polycyclic aromatic hydrocarbons (PAHs)	--	Minimum 6 hour, maximum 8 hour period	Every 6 months	ISO 11338-1,2

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard(s) or method(s)
South Stack flue 1, 2 As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Multifuel facility Boiler 18 and Boiler 19	Ammonia (NH ₃)	5 mg/m ³	Daily average	Continuous where CEM installed.	BS EN 14181 and BS EN 1526

Table S3.1(a) Point source emissions to air during abnormal operation of incineration plant – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
South Stack flue 1,2 As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Particulate matter	Multifuel facility lines Boiler 18 and Boiler 19	150 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 during abatement plant failure
	Total Organic Carbon (TOC)		20 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 during abatement plant failure
	Carbon monoxide		100 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 during abatement plant failure

Table S3.2 Point source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1A As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Site surface and roof water	No parameters set	No visible oil or grease			
W2A As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Site surface and roof water	No parameters set	No visible oil or grease	-	-	-

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Boiler Blow down	None set	-	-	-	-
S5 As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Cooling tower blow down	None set	-	-	-	-

Table S3.4 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
As per improvement condition IC11	Wind Speed and Direction	Continuous	Anemometer	Monitoring shall commence on commissioning of the Multifuel Facility lines Boiler 18 and Boiler 19.
Multifuel Facility lines Boiler 18 and Boiler 19	Temperature (° C)	Continuous	Traceable to national standards.	As agreed in writing with the Environment Agency.

Table S3.4 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Location close to the Combustion Chamber inner wall or as identified and justified in Application				
Multifuel Facility lines Boiler 18 and Boiler 19	Exhaust gas temperature	Continuous	Traceable to national standards.	As agreed in writing with the Environment Agency.
Multifuel Facility lines Boiler 18 and Boiler 19	Exhaust gas pressure	Continuous	Traceable to national standards	As agreed in writing with the Environment Agency.
Multifuel Facility lines Boiler 18 and Boiler 19	Exhaust gas oxygen content	Continuous	BS EN 15267-3 BS EN 14181	--
Multifuel Facility lines Boiler 18 and Boiler 19	Exhaust gas water vapour content	Continuous	BS EN 15267-3 BS EN 14181	Unless gas is dried before analysis of emissions.

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 from Multifuel Facility lines Boiler 18 and Boiler 19	TOC	3%	Monthly in the first year of operation. Then Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	-
Bottom Ash from Multifuel Facility lines Boiler 18 and Boiler 19	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	-	Monthly in the first year of operation. Then Quarterly		-
Bottom Ash from Multifuel Facility lines Boiler 18 and Boiler 19	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	-	Before use of a new disposal or recycling route		-
APC Residues Multifuel facility lines Boiler 18 and Boiler 19	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	-	Monthly in the first year of operation. Then Quarterly		-
APC Residues from Multifuel Facility lines Boiler 18 and Boiler 19	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	-	Before use of a new disposal or recycling route		- - -
* Or other equivalent standard as agreed in writing with the Environment Agency.					

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1.	South Stack flue 1,2	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Emissions to water Parameters as required by condition 3.5.1	W1A and W2A	Bi-Annually	1 Jan and 1 Jul
TOC	Bottom Ash from Multifuel facility lines Boiler 18 and Boiler 19	Quarterly (but monthly for the first year of operation)	1 Jan, 1 Apr, 1 Jul and 1 Oct
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs. Parameters as required by condition 3.5.1	Bottom Ash from Multifuel facility lines Boiler 18 and Boiler 19	Quarterly (but monthly for the first year of operation)	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions. Parameters as required by condition 3.5.1	Bottom Ash from Multifuel Facility lines Boiler 18 and Boiler 19	Before use of a new disposal or recycling route	--
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs. Parameters as required by condition 3.5.1	APC residues from Multifuel Facility lines Boiler 18 and Boiler 19	Quarterly (but monthly for the first year of operation)	
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 from Multifuel Facility lines Boiler 18 and Boiler 19	Before use of a new disposal or recycling route	--

Functioning and monitoring of the incineration plant as required by condition 4.2.1	--	Annually	1 Jan
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Table S4.2 Annual production/treatment	
Parameter	Units
Total Municipal Waste Incinerated	tonnes
Total Commercial Waste Incinerated	tonnes
Total Refuse Derived Fuel Incinerated	tonnes
Total waste wood Incinerated	tonnes
Total biomass burnt	tonnes
Electrical energy produced	kWh
Thermal energy produced e.g. steam for export	kWh
Electrical energy exported	kWh
Electrical energy used on installation	kWh
Waste heat utilised by the installation	kWh

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Electrical energy exported, imported and used at the installation	Quarterly	KWhrs / tonne of waste incinerated
Gas consumption	Quarterly	tonnes / tonne of waste incinerated
Mass of Bottom Ash produced	Quarterly	tonnes / tonne of waste incinerated
Mass of APC residues produced	Quarterly	tonnes / tonne of waste incinerated
Mass of Other solid residues produced	Quarterly	tonnes / tonne of waste incinerated
Ammonia consumption	Quarterly	tonnes / tonne of waste incinerated
Activated Carbon consumption	Quarterly	tonnes / tonne of waste incinerated
Hydrated Lime consumption	Quarterly	tonnes / tonne of waste incinerated
Water consumption	Quarterly	tonnes / tonne of waste incinerated
Periods of abnormal operation	Quarterly	No of occasions and cumulative hours for current calendar year for each line.
Operating hours for each incineration line in start-up and shut-down	Annually	Average number of hours

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form air 1-7 or other form as agreed in writing by the Environment Agency	14/07/2016
Water	Form water 1 or other form as agreed in writing by the Environment Agency	14/07/2016
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	14/07/2016
Water and other raw material usage	Form WU/RM1 or other form as agreed in writing by the Environment Agency	14/07/2016
Energy usage/export	Form energy 1 or other form as agreed in writing by the Environment Agency	14/07/2016
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	14/07/2016
Residue quality	Form residues 1 and residues 2 or other form as agreed in writing by the Environment Agency	14/07/2016

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, during which the emissions into the air and the discharges of waste water may exceed the prescribed 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 or transported by the grate.

“CEM” Continuous emission monitor.

“CEN” means Comité Européen de Normalisation “bi-annual” means twice per year with at least five months between tests.

“Commissioning” means testing of the new incineration plant that involves any operation of the furnace.

“daily average” for releases of substances to air means the average of valid half-hourly averages or 10 minute averages for CO over a calendar day [consecutive discrete periods of 24 hours as described in the application / agreed with the Environment Agency] 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 to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

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

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

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

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

“ISO” means International Standards Organisation.

“List of Wastes” means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time

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

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

“PAH” means Poly-cyclic aromatic hydrocarbon, and comprises Anthanthrene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[b]naph(2,1-d)thiophene, Benzo[c]phenanthrene, Benzo[ghi]perylene, Benzo[a]pyrene, Cholanthrene, Chrysene, Cyclopenta[c,d]pyrene, Dibenz[ah]anthracene, Dibenz[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.

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

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

“shut down” is any period where the plant is being returned to a non-operational state and there is no waste 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 has been fed to the plant [in sufficient quantity to cover the grate and] to initiate steady-state conditions or agreed in writing with the Environment Agency.

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

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

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

“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:

- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content
- (c) in relation to gases from incineration plants other than those burning waste oil, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry.

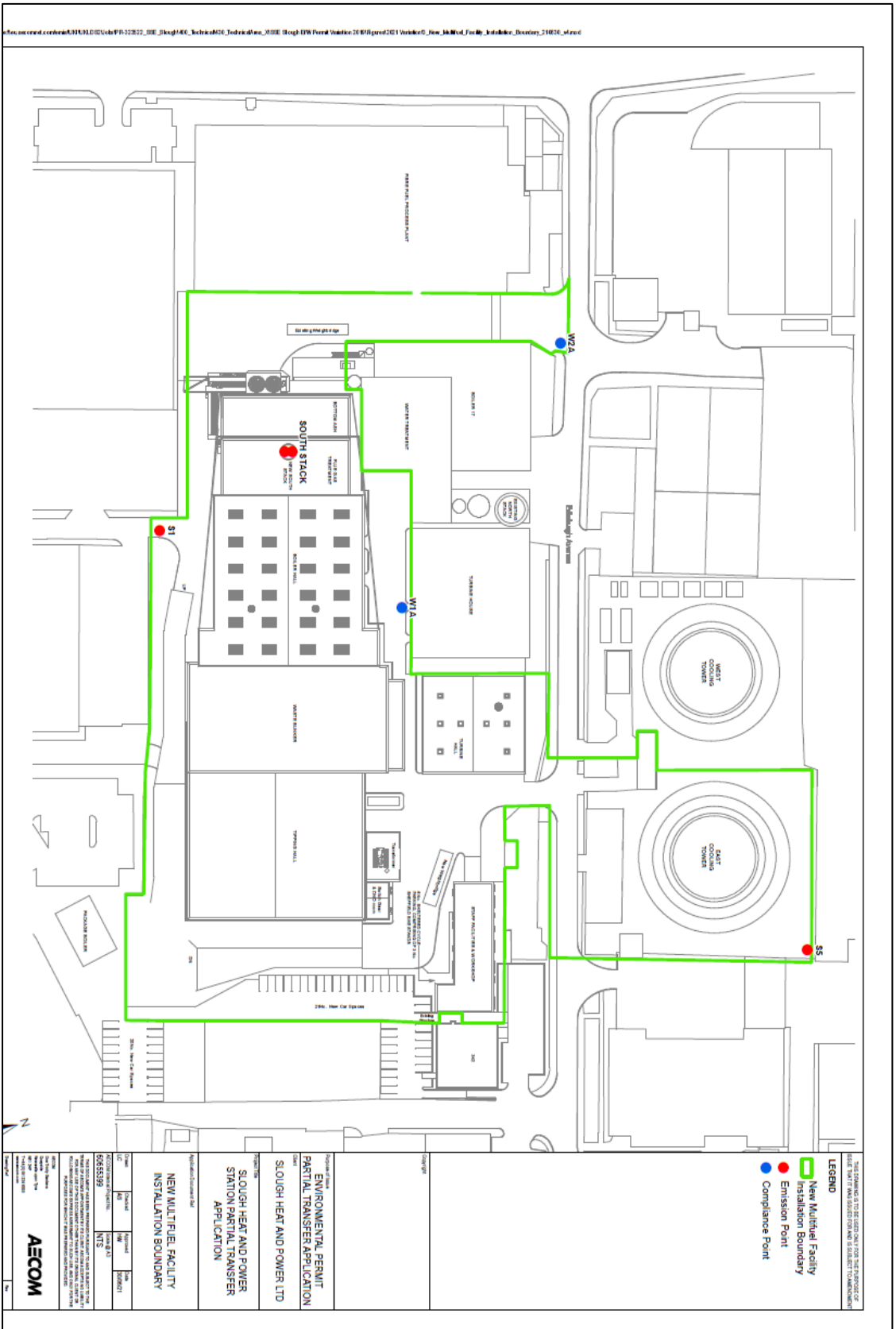
For dioxins/furans and dioxin-like PCBs the determination of the toxic equivalence concentration (I-TEQ, & WHO-TEQ for dioxins/furans, WHO-TEQ for dioxin-like PCBs) stated as a release limit and/ or reporting requirement, the mass concentrations of the following congeners have to be multiplied with their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

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

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

TEF schemes for dioxin-like PCBs			
Congener	WHO-TEF		
	2005	1997/8	
	Humans / mammals	Fish	Birds
2,3',4,4',5-PeCB (118)	0.00003	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.00003	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.00003	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.00003	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00003	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.00003	<0.000005	0.00001

Schedule 7 – Site plan



END OF PERMIT

Notice of transfer and variation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Slough Heat and Power Limited

Slough Heat and Power Station
342 Edinburgh Avenue
Slough Trading Estate
Berkshire
SL1 4TU

Transfer application number

EPR/CP3031SX/T006

Permit number

EPR/CP3031SX

Slough Heat and Power Station

Permit number EPR/CP3031SX

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the transfer in part of an environmental permit to a new operator (the transferee) and the changes made to the original permit (the transferor's permit).

Slough Heat and Power Limited generate electricity for input to both the Slough Trading Estate and the National Grid with excess heat supplying steam and hot water to local customers on the trading estate. The site is predominantly flat and approximately 32 m above ordinance datum.

The installation is located on the Slough Trading Estate, Slough, Berkshire. The site covers an area of approximately 5 hectares and is approximately centred on National Grid Reference SU9538981483. The site is mainly located on the south side of Edinburgh Avenue and is occupied by several buildings and facilities which form the installation including: incineration and combustion activities, water treatment plant, condensate treatment, raw material storage and maintenance. There is also one natural draught cooling tower occupying an area on the opposite northern side of Edinburgh Avenue.

The boiler has a maximum capacity of 120,000 tonnes per annum.

This part transfer is to transfer the Multifuel facility incineration lines to Keadby Generation Limited.

Any changes made as a result of the part transfer are set out in Schedule 1.

We consider that in reaching our decision to transfer the permit we have taken into account all relevant considerations and legal requirements.

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/CP3031SX	Duly made 18/04/2006	
Additional Information Received	14/08/2006	
Request to extend determination	15/08/2006	Received 18/08/2006
Request to extend determination	29/11/2006	Received 01/12/2006
Permit determined	21/12/2006	
Variation application EPR/CP3031SX/V002	Duly made 13/04/2011	Application to replace boiler 16 with a 40 MW, thermal input natural gas fired boiler
Variation determined EPR/CP3031SX/V002	27/06/2011	Varied permit issued.
Application EPR/CP3031SX/V003 (variation and consolidation)	Duly made 14/04/2015	Application to vary the permit to remove old incineration lines CFB1 and CFB2 and the Fibre Fuel Plant and add two new incineration lines referred to as the Multi-fuel Facility.
Schedule 5 request (dated 26/06/2015)	Received 06/08/2015	Clarification of details relating to waste fuel storage periods, waste code description, firewater quantity, standby generator, plant efficiency, waste firing diagram and dust suppression.

Status log of the permit		
Description	Date	Comments
Additional Information	28/08/2015	Flue gas treatment location, Green house gas assessment report, confirmation of some source segregated waste streams.
Additional Information	30/09/2015	Boiler thermal input, fibre fuel plant removal and gas oil storage.
Additional Information	15/02/2016	Clarification on short term CO limits, clarification on 800°C temperature trigger on B17 gas burners.
Additional Information	13/05/2016	Clarification on operator's waste derived fuel (WDF) terminology.
Variation determined EPR/CP3031SX/V003	14/07/2016	Varied permit issued.
Notified of change of company registered address	22/09/2017	Registered Office changed to No.1 Forbury Place, 43 Forbury Road, Reading, RG1 3JH.
Variation Issued (EPR/CP3031SX/V004)	12/10/2017	Varied permit issued to Slough Heat & Power Limited.
Application EPR/CP3031SX/V005 (variation and consolidation)	Duly made 28/04/2020	Application to vary the permit to increase the throughput to the Multifuel facility to 480,000 tonnes.
Variation determined EPR/CP3031SX/V005	26/10/2020	Varied permit issued.
Application EPR/CP3031SX/T006 (part transfer of permit EPR/CP3031SX)	Duly made 12/11/2021	
Transfer determined EPR/CP3031SX	25/03/2022	

End of introductory note

Notice of transfer

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 21 of the Environmental Permitting (England and Wales) Regulations 2016 transfers part of

Permit number

EPR/CP3031SX

Issued to

Slough Heat and Power Limited (“the operator”)

whose registered office is

**No.1 Forbury Place
43 Forbury Road
Reading
RG1 3JH**

company registration number 00174142

to operate an installation at

**Slough Heat and Power Station
342 Edinburgh Avenue
Slough Trading Estate
Berkshire
SL1 4TU**

to Keadby Generation Limited

The retained part of the permit is varied to the extent set out in the schedules.

The notice shall take effect from 25/03/2022

Name	Date
Claire Roberts	25/03/2022

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit EPR/CP3031SX as a result of the transfer.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/CP3031SX

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/CP3031SX/T006 authorising,

Slough Heat and Power Limited (“the operator”),

whose registered office is

No.1 Forbury Place

43 Forbury Road

Reading

RG1 3JH

company registration number 00174142

to operate an installation at

Slough Heat and Power Station

342 Edinburgh Avenue

Slough Trading Estate

Berkshire

SL1 4TU

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

Name	Date
Claire Roberts	25/03/2022

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”).

2.2 The site

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

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2 table S2.2; and
 - (b) it conforms to the description in the documentation supplied by the producer or holder; and
 - (c) it having been separately collected for recycling, it is subsequently unsuitable for recovery by recycling.
- 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 of Boiler 17 is below, or falls below, 800°C; or
 - (b) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded; or

- (c) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than under abnormal operating conditions; or
 - (d) 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;
 - (c) continuous measurement shows that an emission exceeds any emission limit value in schedule 3 table S3.1 (a) due to disturbances or failures of the abatement systems;
 - (d) continuous emission monitors or alternative techniques to demonstrate compliance with the emission limit value(s) for particulates, TOC and / or CO in schedule 3 table S3.1(a), as agreed in writing with the Environment Agency, are unavailable.
- 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.
- 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 except in “abnormal operation”, when 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(a), S3.2 and S3.3.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Wastes produced at the site shall, as a minimum, be sampled and analysed in accordance with schedule 3 table S 3.5 Additional samples shall be taken and tested and appropriate action taken, whenever:
- (a) disposal or recovery routes change; or
 - (b) it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

3.2 Emissions 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.
- 3.2.4 The Operator shall carry out monitoring of soil and groundwater in accordance with IED articles 14(1)(b), 14(1)(e) and 16(2) to the protocol agreed in writing with the Environment Agency under IC25.

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, S3.1(a) S3.2 and S3.3;
- (b) process monitoring specified in table S3.4;
- (c) residue quality 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, S3.1(a) S3.2 and S3.3 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:
 - Carbon monoxide 10%

- Sulphur dioxide 20%
 - Oxides of nitrogen (NO & NO₂ expressed as NO₂) 20%
 - Particulate matter 30%
 - Total organic carbon (TOC) 30%
 - Hydrogen chloride 40%
- (b) valid half-hourly average values or 10-minute averages shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals in condition 3.5.5 (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 or 10-minute average shall in any case be considered valid if measurements are available for a minimum of 20 minutes or 7 minutes during the half-hour or 10-minute period respectively. The number of half-hourly or 10-minute averages so validated shall not exceed 5 or 15 respectively per day;
- (d) daily average values shall be determined as the average of all the valid half-hourly average or 10-minute average values within a calendar day. The daily average value shall be considered valid if no more than five half-hourly average or 15 10-minute average values in any day have been determined not to be valid;
- (e) no more than ten daily average values per year shall be determined not to be valid.

3.6 Fire prevention

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

3.6.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
- (b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

4 Information

4.1 Records

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

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

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

4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 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;
 - (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 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.

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

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

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

4.4 Interpretation

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

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

Schedule 1 – Operations

Table S1.1 activities			
Activity Reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A1	S5.1 A1 (b) The incineration of non-hazardous waste in a waste incineration plant or waste co-incineration plant with a capacity exceeding 3 tonnes per hour	Boiler 17 (B17) incineration line (Thermal input 69MW)	The incineration of non-hazardous waste including the operation of incineration lines B17, boilers and auxiliary burners; facilities for the treatment of exhaust gases; on-site facilities for 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). Waste types and quantities as specified in table S2.2 of this permit.
A2	S1.1B(a) (i) Burning of any fuel in a boiler with a net rated thermal input of 20 or more megawatts, but a rated thermal input of less than 50 megawatts	Package Boiler with thermal input of 22MW	From fuel supply to release of exhaust gases from chimney.
Directly Associated Activity			
A3	Electricity Generation	Steam turbine generator; 1 x 13 MW Electrical (T17) 1 x 8 MW Electrical (T16)	From receipt of steam from steam mains to the export of electricity to Slough trading estate and the National Grid.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to section 2.1 and 2.2 in the application.	31/03/2006
Receipt of additional information to the application EPR/CP3031SX/A001	Response to the request for information with regards to: air emissions abatement, discharge points to water, sewer and groundwater, borehole locations, improvements to the storage of acid and caustic, level indication and tank high level alarms, tank 3 and associated underground pipe work, boiler blow down, use of drain covers, replacement of existing CEMs for CFB1, CFB2 and B17, definition of start-up and shutdown, point source monitoring requirements for co-incinerators, monitoring and reporting emissions to sewer, pollution prevention measures for surface water discharges, NO _x control from the gas turbine, operation of the gas turbine in open cycle. Storage of potentially dusty materials, clearing of surface water drains and the oil drum storage area.	14/08/2006
Variation Application EPR/CP3031SX/V002	Application Document 2, Section 2.4 Function of the Package Boiler, Application Document 4, Sections 4.3 Environmental Impact Assessment, Section 4.4 Energy Efficiency, Section 4.5 Energy Efficiency and Section 4.6 Waste Minimisation	13/04/2011
Email receipt of further information	Response regarding the decommissioning of Boiler 15 upon successful commissioning of the Package Boiler	09/06/2011
Application for variation EPR/CP3031SX/V003	The response to section C3 in the application and supporting documentation.	14/04/2015
Response to Schedule 5 Notice dated 26/06/15	Clarification of details relating to waste fuel storage periods, waste code description, firewater quantity, standby generator, plant efficiency, waste firing diagram and dust suppression.	06/08/2015
Additional Information	Flue gas treatment location, Green House Gas Assessment Report, confirmation of some source segregated waste streams.	28/08/2015
Additional Information	Boiler thermal input, fibre fuel plant removal and gas oil storage.	30/09/2015
Additional Information	Clarification on short term CO limits, clarification on 800°C temperature trigger on B17 gas burners.	15/02/2016
Additional Information	Clarification on operator's waste derived fuel (WDF) terminology.	13/05/2016
Variation Application EPR/CP3031SX/V005	Application forms C2 and C3 and referenced supporting information.	28/04/2020

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>BS EN 14181</p> <p>The Operator shall calibrate and verify the performance of all CEMs required for monitoring the parameters contained in tables 4.1(a) and 4.1(b) of this permit to BS EN 14181 and submit a summary report to the Agency as evidence of compliance with the requirements of BS EN 14181.</p>	Completed
IC2	<p>Environmental Training Needs</p> <p>A written procedure shall be submitted to the Agency which identifies environmental training needs and the specific posts, scope and level of such training, in accordance with section 2.3 of the Combustion Technical Guidance Note. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the procedure. The procedure shall be implemented by the Operator from the date of approval in writing by the Agency</p>	Completed
IC3	<p>Mcerts</p> <p>A written procedure shall be submitted to the Agency detailing the measures to be used so that all monitoring equipment, personnel and organisations employed for the emissions monitoring programme shall have either MCERTS certification or accreditation in accordance with condition 3.6.3. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the procedure. The procedure shall be implemented by the Operator from the date of approval in writing by the Agency</p>	Completed
IC4	<p>Accident Management Plan which Identifies the Likelihood and Consequences of Accidents</p> <p>A revised accident management plan shall be implemented and maintained which covers the aspects set out in Section 2.8 of the Combustion Technical Guidance Note.</p> <p>In particular the plan shall identify the likelihood and consequences of accidents in addition to identifying actions which prevent accidents or mitigate their consequences.</p> <p>The main elements of the plan shall be submitted in writing to the Agency for approval.</p>	Completed
IC5	<p>Assessment of Procedures to Contain Potentially Contaminated Firewater</p> <p>The Operator shall undertake an assessment of the measures in place to contain potentially contaminated firewater against the requirements of Pollution Prevention Guidelines (PPG18) and the relevant sections of the Combustion Technical Guidance Note. The assessment shall include an assessment of the risks, and the techniques necessary to reduce those risks, posed by firewater runoff.</p> <p>The Operator shall submit a report of the assessment to the Agency. Any improvements identified by the assessment shall be implemented by the Operator from the date of approval by the Agency.</p>	Completed
IC6	<p>Monitoring for B15, GT, WHB</p> <p>The Operator shall develop a monitoring plan that shall detail the proposed methodology (including frequency and duration) to carry out the monitoring of emissions to air identified within Tables S4.1(c) and S4.1(d). The methodology shall comply with the requirements of Agency monitoring guidance documents:</p> <ul style="list-style-type: none"> - M1 – Sampling Requirements For Stack Emission Monitoring; - M2 – Monitoring Of Stack Emissions To Air; and - Section 2.10 of the Combustion Technical Guidance Note. <p>The plan shall be implemented by the Operator from the date of approval in writing by the Agency.</p>	Completed

IC7	<p>Emissions via the Culvert</p> <p>The Operator shall undertake an assessment of the pollution prevention measures used to control emissions to the Farnham Road settling pond via the onsite culvert from emissions point W1 and W2 including the measures required to comply with the benchmark values given for releases to water in section 3 of the Combustion Technical Guidance Note.</p> <p>The Operator shall submit the main elements of the assessment in a report to the Agency in writing.</p> <p>The report shall include a timetable for the implementation of the actions identified by the review. Any improvements identified by the assessment shall be implemented by the Operator from the date of approval by the Agency.</p>	Completed
IC8	<p>Water Efficiency Audit</p> <p>A water efficiency audit shall be submitted to the Agency in writing for approval in accordance with section 2.4.3 of the Combustion Technical Guidance Note. The audit shall contain dates for the implementation of individual improvement measures.</p> <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the audit.</p>	Completed
IC9	<p>Gas Turbine BAT Review</p> <p>The Operator shall carry out an assessment of the options available to reduce the emissions to air from the gas turbine. The assessment shall consider the cost and benefit of reducing the emission down to the benchmark levels in the Agency Combustion Technical Guidance Note (comparing the use of gas oil and natural gas).</p> <p>The Operator shall provide a written report detailing the findings of the assessment, any recommendations for improvements to the operation of the plant and an implementation timetable for approval.</p>	Completed
IC10	<p>EMS</p> <p>The Operator shall adopt a formal environmental management system (EMS), which shall be audited at least annually by an external competent body, to check that all activities are being carried out in conformity with the EMS requirements. The EMS shall take into account the indicative requirements of section 2.3 of the Combustion Technical Guidance Note.</p>	Completed
IC11	<p>Waste Minimisation Audit</p> <p>A waste management audit shall be submitted to the Agency in writing for approval in accordance with section 2.4.2 of the Combustion Technical Guidance Note. The audit shall contain dates for the implementation of individual improvement measures.</p> <p>The audit shall include, but not be limited to:</p> <ul style="list-style-type: none"> - An assessment of the best practical environmental options for the disposal of wastes. - Clear identification of waste storage areas including capacity and maximum retention times. - An assessment of the materials burned in B17, CFB1 and CFB2 in that waste/fuel with the lowest ash producing potential are selected. <p>The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the audit.</p>	Completed
IC12	<p>Site Closure Plan</p> <p>The Operator shall produce a written site closure plan in accordance with the requirements of section 2.11 of the Combustion Technical Guidance Note.</p> <p>The Operator shall submit a written copy of the site closure plan for approval to the Agency.</p>	Completed

IC13	<p>HFO Phase Out</p> <p>A written plan shall be submitted to the Agency detailing the results of an assessment to identify the options to replace Heavy Fuel Oil with a less polluting oil. Where appropriate, the plan shall contain dates for the implementation of individual measures. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the plan.</p> <p>The Operator shall implement the proposals as agreed in writing with the Environment Agency.</p>	Completed
IC14	<p>The Operator shall provide the Agency with a commissioning report for the new package boiler. The commissioning report for the package boiler is to include, but is not limited, to the following;</p> <p>Demonstration of compliance with manufacturing specifications, and Improvements to the environment as a result of the installation and operation of the package boiler.</p>	Completed
IC23	<p>The operator shall submit a written fire prevention plan produced in line with the requirement of our fire prevention plan guidance (March 2015) to the Environment Agency for approval.</p> <p>Once approved by the Environment Agency, the operator shall implement the measures outlined in the plan within the timescale agreed with the Environment Agency.</p>	Completed
<p>Note. Improvement Conditions 15 to 22 referred to improvement conditions for a multi fuel facility that has been transferred to another operator.</p>		

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Gas oil	Less than 0.1% w/w sulphur content

Table S2.2 Permitted waste types and quantities for incineration plant	
Maximum quantity	The annual throughput for the boiler shall not exceed 120,000 tonnes
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 08	wastes from sorting of paper and cardboard destined for recycling
04	wastes from the leather, fur and textile industries
04 02	wastes from the textile industry
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
09	wastes from the photographic industry
09 01	wastes from the photographic industry
09 01 08	photographic film and paper free of silver or silver compounds
15	waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 05	composite packaging
15 01 06	mixed packaging
17	construction and demolition wastes (including excavated soil from contaminated sites)
17 02	wood, glass and plastic
17 02 01	wood

Table S2.2 Permitted waste types and quantities for incineration plant	
Maximum quantity	The annual throughput for the boiler shall not exceed 120,000 tonnes
Waste 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 01	paper and cardboard
19 12 04	plastic and rubber
19 12 07	wood other than mentioned in 19 12 06
19 12 08	textiles
19 12 10	combustible material (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	separately collected fractions (except 15 01)
20 01 01	process waste from segregated clean sources of paper.
20 01 11	textiles
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	process waste from segregated clean sources of plastics.
20 03	other municipal wastes
20 03 01	mixed municipal waste (no black bag waste)

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard(s) or method(s)
North Stack flue 1,2,3 As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Boiler 17	Total organic carbon (TOC) mg/m ³	10 mg/m ³	Daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Total Organic Carbon (TOC)	20 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Carbon monoxide	50 mg/m ³	Daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Carbon monoxide	150 mg/m ³	95% of all 10-minute averages in any 24-hour period	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Particulate matter	10 mg/m ³	Daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Particulate matter	30 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Hydrogen chloride	10 mg/m ³	Daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Hydrogen chloride	60 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Hydrogen fluoride	2 mg/m ³	periodic over minimum 1-hour period	Quarterly in first year. Then Bi-annual	BS ISO 15713

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard(s) or method(s)
		Sulphur dioxide	50 mg/m ³	Daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Sulphur dioxide	200 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	200 mg/m ³	Daily average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Oxides of nitrogen (NO and NO ₂ expressed as NO ₂)	400 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3
		Cadmium & thallium and their compounds (total)	0.05 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 14385
		Mercury and its compounds	0.05 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 13211
		Antimony, Arsenic, Lead, Chromium, Cobalt, Copper, Manganese, Nickel, and vanadium and their compounds (total)	0.5 mg/m ³	periodic over minimum 30 minute, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 14385

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard(s) or method(s)
		Nitrous oxide (N ₂ O)	No Limit set	periodic over minimum 1-hour period	For periodic measurement, quarterly in the first year of operation, then bi-annual	BS EN ISO 21258
		Dioxins / furans (I-TEQ)	0.1 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
		Dioxins / furans (WHO-TEQ Humans / Mammals)	--	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948 Parts 1, 2 and 3
		Dioxins / furans (WHO-TEQ Fish)	--	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948 Parts 1, 2 and 3
		Dioxins / furans (WHO-TEQ Birds)	--	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948 Parts 1, 2 and 3
		Dioxin-like PCBs (WHO-TEQ Humans / Mammals)	--	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948-4
		Dioxin-like PCBs (WHO-TEQ Fish)	--	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948-4
		Dioxin-like PCBs (WHO-TEQ Birds)	--	periodic over minimum 6 hours, maximum 8 hour period	Quarterly in first year. Then Bi-annual	BS EN 1948-4
		Polycyclic aromatic hydrocarbons (PAHs)	--	Minimum 6 hour, maximum 8 hour period	Every 6 months	ISO 11338-1,2

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard(s) or method(s)
Package Boiler Stack As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Package Boiler firing natural gas	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	100 mg/m ³	Average over sampling period	Annually	As per Environment Agency Guidance TGN M2 – 'Monitoring of Stack Emissions to Air' or as agreed in writing by the Environment Agency
		Carbon Monoxide	100 mg/m ³	Average over sampling period	Annually	As per Environment Agency Guidance TGN M2 – 'Monitoring of Stack Emissions to Air' or as agreed in writing by the Environment Agency

Table S3.1(a) Point source emissions to air during abnormal operation of incineration plant – emission limits and monitoring requirements						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
North Stack flue 1,2,3 As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Particulate matter	Boiler 17	150 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 during abatement plant failure
	Total Organic Carbon (TOC)		20 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 during abatement plant failure
	Carbon monoxide		100 mg/m ³	½-hr average	Continuous measurement	BS EN 14181 and BS EN 15267-3 during abatement plant failure

Table S3.2 Point source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Site surface and roof water	No parameters set	No visible oil or grease			
W2 As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Site surface and roof water	No parameters set	No visible oil or grease	-	-	-

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S2 As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Water Treatment plant	None set	-	-	-	-
S3 As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Boiler blow down	None set	-	-	-	-
S4 As referenced in 'Site Layout Plan' submitted with application EPR/CP3031SX/V005	Cooling tower blow down	None set	-	-	-	-

Table S3.4 Process monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
B17 Location close to the Combustion Chamber inner wall or as identified and justified in Application	Temperature (° C)	Continuous	Traceable to national standards.	As agreed in writing with the Environment Agency.
B17	Exhaust gas temperature	Continuous	Traceable to national standards.	As agreed in writing with the Environment Agency.
B17	Exhaust gas pressure	Continuous	Traceable to national standards	As agreed in writing with the Environment Agency.
B17	Exhaust gas oxygen content	Continuous	BS EN 15267-3 BS EN 14181	--
B17	Exhaust gas water vapour content	Continuous	BS EN 15267-3 BS EN 14181	Unless gas is dried before analysis of emissions.

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 from Boiler 17	TOC	3%	Annually or other frequency as agreed in writing with the Environment Agency	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	-
Bottom Ash from Boiler 17	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	-	Annually or other frequency as agreed in writing with the Environment Agency		-
Bottom Ash from Boiler 17	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	-	Before use of a new disposal or recycling route		-
APC Residues Boiler 17	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	-	Annually or other frequency as agreed in writing with the Environment Agency		-

Table S3.5 Residue quality					
Emission point reference or source or description of point of measurement	Parameter	Limit	Monitoring frequency	Monitoring standard or method *	Other specifications
APC Residues from Boiler 17	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	-	Before use of a new disposal or recycling route		-
Cyclone Ash from Boiler 17	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.	-	Annually or other frequency as agreed in writing with the Environment Agency		-
Cyclone Ash from Boiler 17	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions	-	Before use of a new disposal or recycling route		-
* Or other equivalent standard as agreed in writing with the Environment Agency.					

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.5.1.	North Stack flue 1,2,3	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
	Package Boiler Stack	Bi-Annually	1 Jan and 1 Jul
Emissions to water Parameters as required by condition 3.5.1	W1 and W2	Bi-Annually	1 Jan and 1 Jul
TOC	Bottom Ash from Boiler 17	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs. Parameters as required by condition 3.5.1	Bottom Ash from Boiler 17	Annually or other frequency as agreed in writing with the Environment Agency	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions. Parameters as required by condition 3.5.1	Bottom Ash from Boiler 17	Before use of a new disposal or recycling route	--
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs. Parameters as required by condition 3.5.1	APC residues from Boiler 17	Annually or other frequency as agreed in writing with the Environment Agency	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions. Parameters as required by condition 3.5.1	APC Residues from B17	Before use of a new disposal or recycling route	--

Functioning and monitoring of the incineration plant as required by condition 4.2.1	--	Annually	1 Jan
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Table S4.2 Annual production/treatment	
Parameter	Units
Total Municipal Waste Incinerated	tonnes
Total Commercial Waste Incinerated	tonnes
Total Refuse Derived Fuel Incinerated	tonnes
Total waste wood Incinerated	tonnes
Total biomass burnt	tonnes
Electrical energy produced	kWh
Thermal energy produced e.g. steam for export	kWh
Electrical energy exported	kWh
Electrical energy used on installation	kWh
Waste heat utilised by the installation	kWh

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Electrical energy exported, imported and used at the installation	Quarterly	KWhrs / tonne of waste incinerated
Gas consumption	Quarterly	tonnes / tonne of waste incinerated
Mass of Bottom Ash produced	Quarterly	tonnes / tonne of waste incinerated
Mass of cyclone ash, flue gas treatment ash and fly ash produced	Quarterly	tonnes / tonne of waste incinerated
Mass of Other solid residues produced	Quarterly	tonnes / tonne of waste incinerated
Activated Carbon consumption	Quarterly	tonnes / tonne of waste incinerated
Hydrated Lime consumption	Quarterly	tonnes / tonne of waste incinerated
Water consumption	Quarterly	tonnes / tonne of waste incinerated
Periods of abnormal operation	Quarterly	No of occasions and cumulative hours for current calendar year for each line.
B17 Combustion chamber temperature falls between 800°C and 850°C	Annually	Number of occurrences >10 minutes
Operating hours for each incineration line in start-up and shut-down	Annually	Average number of hours

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Air	Form air 1-7 or other form as agreed in writing by the Environment Agency	14/07/2016
Water	Form water 1 or other form as agreed in writing by the Environment Agency	14/07/2016
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	14/07/2016
Water and other raw material usage	Form WU/RM1 or other form as agreed in writing by the Environment Agency	14/07/2016
Energy usage/export	Form energy 1 or other form as agreed in writing by the Environment Agency	14/07/2016
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	14/07/2016
Residue quality	Form residues 1 and residues 2 or other form as agreed in writing by the Environment Agency	14/07/2016

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, during which the emissions into the air and the discharges of waste water may exceed the prescribed 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 or transported by the grate.

“CEM” Continuous emission monitor.

“CEN” means Comité Européen de Normalisation “bi-annual” means twice per year with at least five months between tests.

“Commissioning” means testing of the new incineration plant that involves any operation of the furnace.

“daily average” for releases of substances to air means the average of valid half-hourly averages or 10 minute averages for CO over a calendar day [consecutive discrete periods of 24 hours as described in the application / agreed with the Environment Agency] 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 to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

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

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

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

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

“ISO” means International Standards Organisation.

“List of Wastes” means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time

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

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

“PAH” means Poly-cyclic aromatic hydrocarbon, and comprises Anthanthrene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[b]naph(2,1-d)thiophene, Benzo[c]phenanthrene, Benzo[ghi]perylene, Benzo[a]pyrene, Cholanthrene, Chrysene, Cyclopenta[c,d]pyrene, Dibenz[ah]anthracene, Dibenz[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.

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

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

“shut down” is any period where the plant is being returned to a non-operational state and there is no waste 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 has been fed to the plant [in sufficient quantity to cover the grate and] to initiate steady-state conditions or agreed in writing with the Environment Agency.

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

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

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

“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:

- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content
- (c) in relation to gases from incineration plants other than those burning waste oil, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry.

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

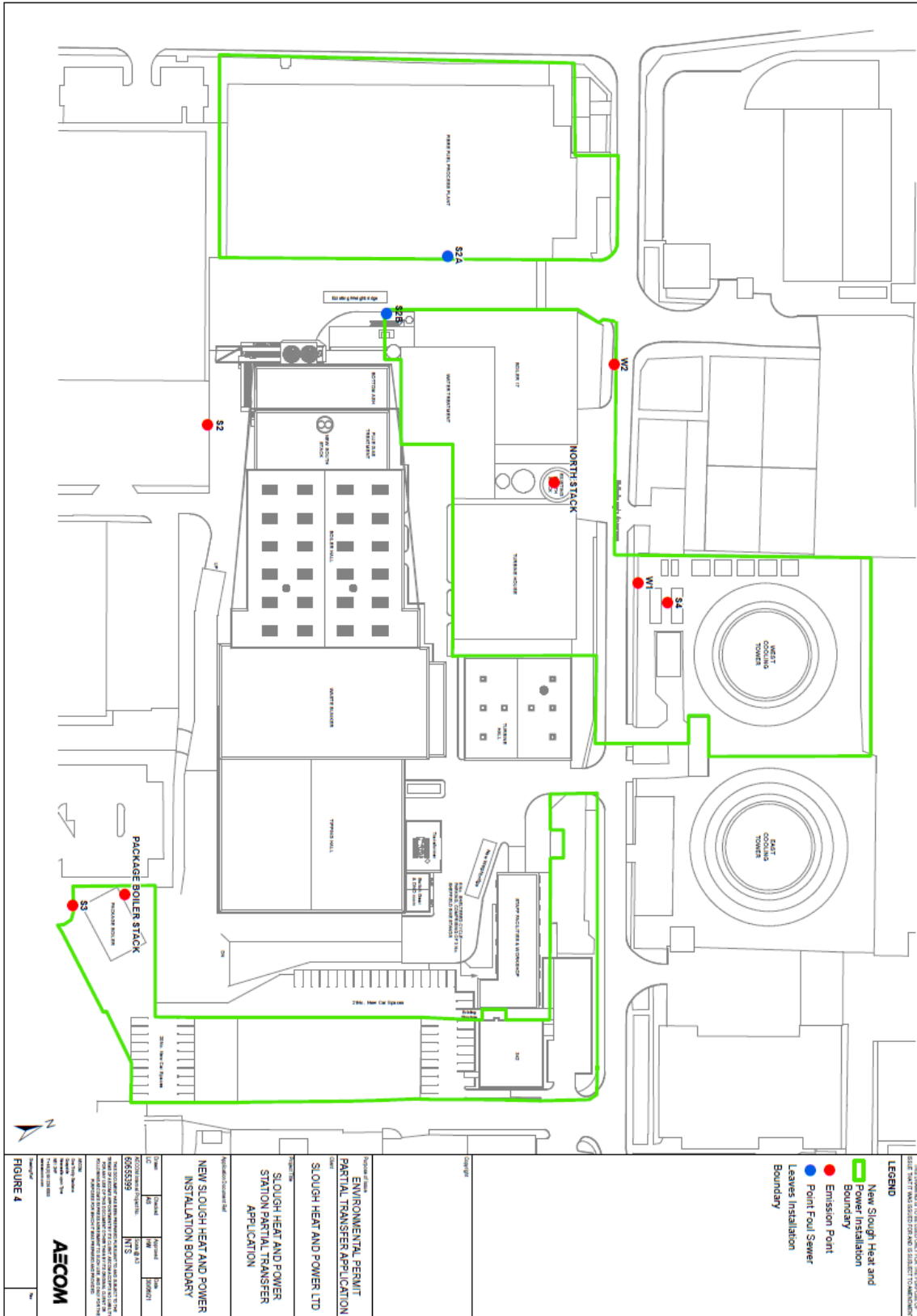
TEF schemes for dioxins and furans				
Congener	I-TEF	WHO-TEF		
	1990	2005	1997/8	
		Humans / Mammals	Fish	Birds
Dioxins				
2,3,7,8-TCDD	1	1	1	1
1,2,3,7,8-PeCDD	0.5	1	1	1
1,2,3,4,7,8-HxCDD	0.1	0.1	0.5	0.05
1,2,3,6,7,8-HxCDD	0.1	0.1	0.01	0.01
1,2,3,7,8,9-HxCDD	0.1	0.1	0.01	0.1
1,2,3,4,6,7,8-HpCDD	0.01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

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

TEF schemes for dioxin-like PCBs			
Congener	WHO-TEF		
	2005	1997/8	
	Humans / mammals	Fish	Birds
2,3',4,4',5-PeCB (118)	0.00003	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.00003	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.00003	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.00003	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00003	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.00003	<0.000005	0.00001

Schedule 7 – Site plan

File Name: acconet.com\arch\2018\10\20\CP3031X\PR-32722_001_01.dwg; Author: 2018; Title: Slough Heat and Power Station; Date Plotted: 2018/10/20 10:58:41; Plot Device: HPGL; Plot Style: acconet.ctb; Plot Date: 2018/10/20 10:58:41; Plot Time: 00:00:00; Plot User: acconet.com\arch\2018\10\20\CP3031X\PR-32722_001_01.dwg



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