Harlow Council

Pollution Prevention and Control Act 1999
Environmental Permitting Regulations 2010

Notice Reference: EPR/B/5.1/PWC

Environmental Permitting (England and Wales) Regulations 2010, Regulation 20

Variation Notice

To: Community Crematoria Limited (trading as Parndon Wood Crematorium)

Of: Chapel View
Westerleigh Crematorium
Westerleigh Road
Westerleigh
Bristol
BS37 8QP

Harlow Council ("the Council"), in exercise of the powers conferred on it by Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 ("the 2010 Regulations") as amended, hereby gives you notice that:

The Council has decided to vary the conditions of permit reference PPCA/1.1/PWC/2003 dated 24th August 2012 under the Environmental Permitting (England and Wales) Regulations 2010 in respect of the operation of the installation at:

Community Crematoria Limited
Parndon Wood Crematorium
Parndon Wood Road
Harlow
Essex
CM19 4SF

The Council hereby gives you notice as follows:-

- The variation of the conditions of the permit and the date on which they are to take effect are specified in Schedule 1 to this notice.
- A full consolidated permit reference ***EPR/B/5.1/PWC*** as varied by this notice is contained in Schedule 2 to this notice.
- The variation takes full effect from the date of this notice.

Environmental Health Services
Harlow Council
Civic Centre
The Water Gardens
Harlow
Essex
CM20 1WG

Dated: ***8th July 2013***

Address for all communications

The Authorised Officer for this purpose

Guidance for Operators receiving a Variation Notice

This guidance does not form part of the Variation Notice, but it is for the guidance of those served with the Notice. Further guidance can be found in the General Guidance Manual at www.defra.gov.uk/environment/ppc

Dealing with an Variation Notice
This notice varies the terms of the permit specified in the Notice by amending or deleting certain existing conditions and/or adding new conditions. The Schedules attached to the notice explain which conditions have been amended, added or deleted and the dates on which these have effect. The Council may have included a 'consolidated permit', which takes into account these and previous variations. Where a consolidated permit is not included this variation notice must be read in conjunction with your permit document.

Appeals
Under regulation 31 and Schedule 6 of the 2010 Regulations operators have the right of appeal against the conditions attached to their permit by a variation notice. The right to appeal does not apply in circumstances where the notice implements a direction of the Secretary of State/Welsh Ministers given under regulations 61 or 62 or a direction or when determining an appeal. Appeals against a Variation Notice do not have the effect of suspending the operation of the Notice. Appeals do not have the effect of suspending permit conditions, or any of the mentioned notices. Notice of appeal against a Variation Notice must be given within two months of the date of the variation notification, which is the subject matter or the appeal. The Secretary of State/Welsh Ministers may in a particular case allow notice of appeal to be given after the expiry of this period, but would only do so in the most compelling circumstances.

How to appeal
There are no forms or charges for appealing. However, for an appeal to be valid, appellants (the person/operator making the appeal) are legally required to provide (see paragraphs 2(1) and (2) of Schedule 6 of the 2010 Regulations):

- the appropriate authority written notice of the appeal;
- a statement of the grounds of appeal;
- a copy of any relevant application;
- a copy of any relevant environmental permit;
- a copy of any relevant correspondence between the appellant and the regulator;
- a copy of any decision or notice which is the subject matter of the appeal; and
- a statement indicating whether the appellant wishes the appeal to be in the form of a hearing or dealt with by way of written representations.

Appellants should state whether any of the information enclosed with the appeal has been the subject of a successful application for confidentiality under regulation 48 of the 2010 Regulations, and provide relevant details – see below. Unless such information is provided all documents submitted will be open to inspection. Further guidance on commercial confidentiality can be found in chapter 8 of the PPC General Guidance Manual. Appeals should be despatched on the day they are dated, and addressed to:

The Planning Inspectorate
Environment Team, Major and Specialist Casework
Room 4/04 Kite Wing
Temple Quay House
2 The Square
Temple Quay
Bristol, BS1 6PN

If an appeal is made, the main parties will be kept informed about the next steps, and will also normally be provided with additional copies of each other's representations. To withdraw an appeal – which may be done at any time - the appellant must notify the Planning Inspectorate in writing and copy the notification to the local authority who must in turn notify anyone with an interest in the appeal.

Costs
The operator and local authority will normally be expected to pay their own expenses during an appeal. Where a hearing or inquiry is held as part of the appeal process, by virtue of paragraph 5(6) of Schedule 6, either the appellant or the authority can apply for costs. Applications for costs are normally heard towards the end of the proceedings and will only be allowed if the party claiming them can show that the other side behaved unreasonably and put them to unnecessary expense. There is no provision for costs to be awarded where appeals are dealt with by written representatives.

Offences
Failure to comply with a Variation Notice is an offence under regulation 38(1) (b) of the 2010 Regulations. A person guilty of an offence under this regulation could be liable to (i) a fine of up to £50,000 or imprisonment for a term not exceeding 6 months or both; or (ii) to an unlimited fine or imprisonment for a term not exceeding 5 years or both, depending on whether the matter is dealt with in the Magistrates or Crown Court.

Confidentiality
An operator may request certain information to remain confidential, i.e. not be placed on the public register. The operator must request the exclusion from the public register of confidential information at the time of supply of the information requested by this notice or any other notice. The operator should provide clear justification for each item wishing to be kept from the register. The onus is on the operator to provide a clear justification for each item to be kept from the register. It will not simply be sufficient to say that the process is a trade secret. The test of whether information is confidential for the purposes of being withheld from the public register is complex and is explained, together with the procedures, in chapter 8 of the PPC General Guidance Manual.

National security
Information may be excluded from the public register on the grounds of National Security. If it is considered that the inclusion of information on a public register is contrary to the interests of national security, the operator may apply to the Secretary of State/Welsh Ministers, specifying the information and indicating the apparent nature of risk to national security. The operator must inform the local authority of such an application, who will not include the information on the public register until the Secretary of State/Welsh Ministers has decided the matter.

Variation Notice

Schedule 1

Variation to the conditions of the permit

1.0 Best available techniques

1.1 The Installation shall, subject to the conditions of this Permit, be operated using the techniques, and in the manner described in the documentation submitted in the Permit application, or as otherwise agreed in writing by the Regulator in accordance with the conditions of this Permit.

1.2 The best available techniques shall be used to prevent, or where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the activity which is not specifically regulated by any condition of this permit.

2.0 Extent of the installation

2.1 The activities authorised by this Permit shall not extend beyond the Installation boundary, that being the land shown as edged in red on the site plan EPR/B/5.1/PWC/01 in schedule 1, and described in the variation application and previous applications where relevant. The layout of the Installation is detailed in site plan EPR/B/5.1/PWC/02 in schedule 2.

3.0 Combustion conditions

3.1 The combustion conditions for each cremator shall be monitored for the parameters and at the monitoring frequency set out in table 3.1.

Table 3.1

Row	Parameter	Combustion provision	Type of Monitoring	Monitoring frequency
1	Temperature	Minimum of 800°C in the secondary combustion chamber Minimum of 850°C in the secondary combustion chamber when operating under emergency conditions without abatement	Measure at the exit of the secondary combustion zone; measuring point shall beat the last measuring thermocouple Automatically record temperatures Visual alarm when temperature falls below 800°C Record alarm activations Interlock to prevent cremator loading below 800°C	Continuous
2	Oxygen	At the end of the secondary combustion chamber: If measured wet, 6% minimum ***or*** If measured dry, 6% average and 3% minimum	Record of concentration at outlet of secondary combustion zone Visual alarm and record alarm activations During discontinuous tests, continuous reference oxygen measurements shall be taken at the same location as the parameters tested	Continuous
3	Residence Time	2 seconds residence time (minimum) in the secondary combustion chamber without correction for temperature, oxygen or water vapour	Measurement and calculation of the volume rate of the flue gases throughout the cremation cycle at the cremator exit	On commissioning of new and replacement cremators (see note below in relation to re-bricking and re-builds)

Note: The re-lining or re-bricking a cremator is unlikely to constitute a substantial change, particularly where the work improves emission control. Residence time will need to be demonstrated in the event of a full cremator re-build.

4.0 Emissions release points

4.1 Emissions to air shall only arise from the emission points specified in table 4.1:

Table 4.1

Emission point reference	Emission source	Location of emission point
'A'	**Abated cremator emissions**	**Crematorium chimney (8m above ground level)**
'B'	**Unabated FTIII cremator emissions (by-pass flue)**	**Crematorium chimney (8m above ground level)**
'C'	**Unabated FTII cremator emissions (by-pass flue)**	**Crematorium chimney (8m above ground level)**

5.0 Emission limits

5.1 The limits for emissions to air shall be monitored for the parameters and at the monitoring frequency set out in table 5.1, for abated emissions from each cremator, prior to the point where each cremator flue is manifolded to a single release point. The emission limits shall not be exceeded. Suitable monitoring techniques must be agreed with the Regulator in advance and in writing.

Table 5.1

Row	Parameter	Emission limit	Monitoring method	Monitoring frequency
1	Mercury	50 µg/m^3	Extractive testing	Annual
2	Hydrogen chloride (excluding particulate matter)	30 mg/m^3 hourly average	Extractive testing	Annual
3	Total particulate matter	20 mg/ m^3 hourly average	Filter leak monitor ➢ Provide visual alarms and record levels and alarms, and ➢ set reference levels on commissioning (i.e. set levels at which alarms will activate) **Plus** Instrument health check - i.e. service according to manufacturer's instructions **Plus** Periodic monitoring ➢ Set reference levels for continuous emission monitor (CEM) (i.e. set levels at which alarms will activate	Continuous **Plus** Annual **Plus** Every 3 years
4a	Carbon monoxide	100 mg/m^3 reported as 2 x 30-minute averages	Qualitative monitoring ➢ Record data at 15 second intervals or less ➢ Provide visual alarms and record alarm events **Plus** Periodic test: ➢ Validation of continuous emissions monitor (CEM) output through comparison with periodic test results	Continuous **Plus** Annual
4b	Carbon monoxide	150g in the first hour of cremation for 95% of cremations and 300g in the first hour of cremation for all cremations	Qualitative monitoring ➢ Record data at 15 second intervals or less ➢ Provide visual alarms and record alarm events **Plus** Instrument health check - i.e. service according to manufacturer's instructions **Plus** Periodic test: ➢ Validation of continuous emissions monitor (CEM) output through comparison with periodic test results	Continuous **Plus** Annual **Plus** Annual

Table 5.1 (continued)				
Row	**Parameter**	**Emission limit**	**Monitoring method**	**Monitoring frequency**
5	Organic compounds (excluding particulate matter) expressed as carbon	20 mg/m^3 averaged over an hour of cremation	Extractive testing	Annual
6	Dioxin and furans (PCDD/F) on abated processes for cremators that do not meet the combustion provisions of rows 1, 2 & 3 of table 3.1	0.1 $nanograms/m^3$ as ITEQ	Extractive testing ➢ Continuous monitoring of any temperature, oxygen and flow parameters that apply during the dioxin tests should be required by the permit ➢ Interlock to prevent cremator loading unless those parameters are met	On commissioning of new and replacement cremators

All emissions shall be determined at the standard reference conditions of: Temperature 273K (0°C), pressure 101.3 kPa, 11% Oxygen v/v dry gas unless otherwise stated.

5.2 Emissions from cremations shall, in normal operation, be free from visible smoke.

5.3 There shall be no offensive odour beyond the installation boundary as perceived by the Regulator.

5.4 All other releases to air, other than condensed water vapour, shall be free from persistent visible emissions.

5.5 All emissions to air shall be free from droplets.

5.6 In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions, the Operator shall:

(a). Investigate and undertake remedial action **immediately**, and;
(b). Adjust the process or activity to minimise those emissions, **and**;
(c). Promptly record the events and actions taken.

5.7 The introduction of dilution air to achieve emission limits is not permitted.

5.8 The Operator shall keep a record of quarterly gas consumption for inspection by the Regulator. Gas consumption shall be converted into CO_2 equivalent emissions using the following conversion equation:

Gas useage (kWh) x conversion factor = $kgCO_2e$

6.0 Monitoring techniques

6.1 All continuous monitoring readings shall be on display to appropriately trained operating staff.

6.2 Instruments shall be fitted with visual alarms situated appropriately to warn the Operator of arrestment plant failure or malfunction.

6.3 The activation of alarms shall be automatically recorded.

6.4 All continuous monitors shall be operated, maintained and calibrated (or referenced in the case of filter leak devices) in accordance with the manufacturers instructions, which shall be made available for inspection by the Regulator. The relevant maintenance and calibration (or referencing) shall be recorded.

6.5 Emissions concentrations must report as zero when the plant is off and there is no flow from the chimney stack. If required, a competent person shall confirm that zero is more appropriate than the measured stack concentration if there is no flow.

6.6 Any continuous monitor used shall provide reliable data for more than 95% of the operating time, (i.e. availability >95%). A manual or automatic procedure shall be in place to detect instrument malfunction and to monitor instrument availability.

6.7 Sampling points on new plant shall be designed to comply with the British or equivalent standards.

6.8 The Operator shall ensure that relevant stacks or ducts are fitted with facilities for sampling which allow compliance with the sampling standards.

6.9 Each cremator shall be fitted and operated with its own dedicated gas supply meter.

6.10 Adverse results from **any** monitoring activity (both continuous and non-continuous) shall be investigated by the Operator as soon as the monitoring data has been obtained. The Operator shall:

(a). Identify the cause and take corrective action, and;
(b). Clearly record as much detail as possible regarding the cause and extent of the problem, and the action taken, and;
(b). Re-test to demonstrate compliance as soon as possible; and inform the Regulator of the steps taken and the re-test results.

7.0 Control techniques

7.1 All cremators shall be designed and operated in order to prevent the discharge of smoke, fumes or other substances during charging.

7.2 All cremators shall be designed and operated to ensure complete combustion and shall be fitted with a secondary combustion zone.

7.3 The manufacturer shall state the volume of the secondary combustion zone.

7.4 When re-bricking a cremator, the convolutions of the secondary combustion chamber shall be maintained and the volume of the chamber recalculated and restated. The Operator shall confirm that the gas residence time requirements can still be met.

7.5 The cremator charging system shall be interlocked to prevent the introduction of a coffin to the primary combustion zone unless the secondary combustion zone exceeds the temperature specified in condition 3.1 (row 1 of table 3.1) of this permit.

7.6 The cremators and all ductwork serving the cremators shall be made and maintained gas tight if under positive pressure to prevent the escape of gases from the ductwork or cremator to the air.

7.7 PVC or melamine shall not be used in coffin construction or furnishings.

7.8 Cardboard coffins shall not contain chlorine in the wet strength agent e.g. not using polyamidoamine-epichlorhydrin based resin (PAA-E).

7.9 Packaging for stillbirth, neonatal and foetal remains shall not include any chlorinated plastics.

7.10 Coffins containing lead or zinc shall not be cremated.

7.11 100% of cremators shall be fitted and operated with gas cleaning systems for mercury abatement.

7.12 Where there is only one gas cleaning system, and that system fails, the cremator may continue to be used for up to 48 hours to provide opportunity for the necessary repairs to be completed. The Regulator shall be notified immediately (preferably by fax or email).

7.13 The Operator shall have a written procedure for dealing with the failure of key arrestment plant (key arrestment plant is detailed in Table A in this permit), in order to minimise any adverse effects.

7.14 Emergency relief vents or by-pass systems shall only be used:

(a). when the heat removal plant has failed and the abatement plant would be damaged, ***or***;
(b). during warm-up and shutdown, provided that compliance be demonstrated with the carbon monoxide limit.

7.15 In the event of the use of an emergency relief vent or by-pass system during cremation:

(a). The failure, its cause and cure shall be recorded in the logbook, ***and***;
(b). The Regulator shall be notified immediately (preferably by fax or email).

7.16 Dusty filter wastes and wastes containing mercury shall be kept tightly contained for off-site disposal.

7.17 The remains in the cremator shall only be moved when calcination is complete.

7.18 The removal of ash and non-combustible residues from the cremator shall be undertaken carefully so as to prevent dust emissions via the flue.

7.19 Cremated remains shall be stored and moved (before processing in a cremulator) in a manner than minimises dusty emissions to air. Processed remains shall be stored in covered containers.

7.20 A simple plan shall be drawn up for dealing with emergencies which give rise to mass fatalities, which should mainly address the holding of additional spares and consumables and the training of suitable numbers of staff.

8.0 Reporting & notifying

8.1 The Operator shall, no later than the 1st of April each year, send the Regulator a certificate from the Crematoria Abatement of Mercury Emissions Organisation (CAMEO) or appropriate evidence from a comparable audited burden sharing arrangement or scheme which specifies:-

(a). The total number of cremations completed in the past calendar year;
(b). The number of cremations completed in cremators fitted with operational mercury abatement equipment in the previous calendar year; ***and;***
(c). The number of cremations completed in the previous calendar year and the proportion of those subject to burden sharing arrangements whether or not money has or has not been paid for the benefit of abated cremations; ***and;***
(d). in cases where mercury abatement is fitted but fewer than 50% of cremations at the installation were undertaken in cremators fitted with it in the previous calendar year, the relevant information in both (b) and (c).

8.2 The Regulator shall be informed without delay, whether or not there is related monitoring showing an adverse result;

(a). If there is an emission that is likely to have an effect on the local community, ***or***;
(b). In the event of the failure of key arrestment plant (key arrestment plant is detailed in Table A), ***or***;
(c). In the event of the use of the bypass or emergency relief vent.

8.3 Every six months a report shall be submitted to the Regulator containing the following continuous monitoring data for carbon monoxide and, in respect of unabated emissions, particulate matter. The following data shall be submitted covering the period of a calendar month:

(a). Values that exceed the 95% limit for carbon monoxide (and particulate matter if appropriate) in that period, and;
(b). 60-minute mean emission values that exceed the 100% emission limit carbon monoxide (and particulate matter if appropriate) in that period, and;
(c). A list of the highest 60-minute mean emission values for each period, and;
(d). The 95-percentile value for each period.

8.4 Every six months a report shall be submitted to the Regulator containing the following continuous monitoring data for temperature and oxygen:

(a). Secondary chamber entrance temperature monthly maximum and minimum (of 5-minute averages), and;
(b). Secondary chamber exit temperature monthly maximum and minimum (of 5-minute averages), and;
(c). Oxygen concentration, monthly minimum (of 5-minute averages).

8.5 Where any values have been exceeded in any monthly or six monthly reporting period, records shall be kept that identify the number of times that the limit was exceeded during the reporting period, the levels of the exceedence, and the time, date and cremation reference. This data shall be kept available.

8.6 The Operator shall notify the Regulator at least **7 days** before any periodic or non-continuous monitoring exercise to determine compliance with emission limit values. The Operator shall state the provisional time and date of monitoring, pollutants to be tested and the methods to be used.

8.7 A report of the results of non-continuous emission testing shall be forwarded to the Regulator within **8 weeks** of completion of the sampling. Adverse monitoring results shall be reported **without delay**, and investigated in accordance with condition 6.10.

8.8 The Operator shall seek the written agreement of the Regulator for any operational changes to this Permit, by way of variation, and in requesting a change shall include:

(a) A description of the nature of the proposed change;
(b) The nature and quantity of any emission;
(c) Details of the technology being applied to reduce such emissions, and associated emissions monitoring;
(d) Any other relevant information.

Minor plant modifications are permissible as long as they do not contravene the operational requirements of the application or the Permit, do not affect releases to air, and are notified to the Regulator 14 days prior to making that change.

8.9 No operational change shall be made until agreed in writing by the Regulator. From the implementation date, the Operator shall operate the Permitted Installation in accordance with that change, and the relevant provisions of the application shall be deemed to have been amended.

8.10 The Operator shall, within 6 months of receipt of written notice from the Regulator, submit to the Regulator a report assessing whether all appropriate preventative measures continue to be taken against pollution, in particular through the application of best available techniques at the Installation. The report shall consider any relevant published technical guidance current at the time of the notice which is either supplied with or referred to in the notice, and shall assess the costs and benefits of applying techniques described in that guidance, or otherwise identified by the Operator, that may provide environmental improvement.

8.11 The Operator shall give written notification as soon as practicable (and at least 30 days) prior to any of the following:

(a) Permanent cessation of the operation of part or all of the Permitted Installation;
(b) Cessation of operation of all or part of the Permitted Installation for a period likely to exceed 1 year; and
(c) Resumption of the operation of part or all of the Permitted Installation after a temporary cessation of activities as above.

8.12 The Operator shall notify the following matters to the Regulator in writing within 14 days of their occurrence:

(a) Any change in the Operator's trading name, registered name or registered office address;
(b) Any change to the particulars of the Operator's ultimate holding company (including details of an ultimate holding company where an Operator has become a subsidiary);
(c) Any steps taken by the Operator going into administration, entering into a company voluntary arrangement, being wound up or bankruptcy.

9.0 Maintenance

9.1 The operator shall have the following available for inspection by the Regulator:

(a). A written maintenance programme for all pollution control equipment; ***and***;
(b). A record of maintenance that has been undertaken.

9.2 Written maintenance and cleaning programmes shall be made available to the Regulator with respect to pollution control equipment, including control instrumentation and the cremator secondary chamber, and ducts and flues, and abatement plant.

9.3 Flues and ductwork shall be cleaned to prevent accumulation of materials, as part of the routine maintenance programme.

10.0 Training

10.1 All staff whose functions could impact on air emissions from the activity shall receive appropriate training on those functions. This shall include:

(a). Awareness of their responsibilities under the permit, and;
(b). Steps that are necessary to minimise emissions during start up and shut down, and;
(c). Actions to take when there are abnormal conditions, or accidents or spillages that could, if not controlled, result in emissions.

10.2 The Operator shall maintain a statement of training requirements for each post with the above mentioned functions and keep a record of the training received by each person. These documents shall be made available to the Regulator on request.

11.0 Logbook

11.1 The Operator shall keep records of inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments, collectively referred to as the logbook. The records forming the logbook may be written or electronic records, and shall be kept in accordance with condition 11.2.

11.2 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the Permitted Installation shall:-

(a) Be kept on site
(b) be made available for inspection by the Regulator at any reasonable time;
(c) be supplied to the Regulator on demand and without charge;
(d) be legible;
(e) be made as soon as reasonably practicable;
(f) indicate any amendments which have been made and shall include the original record wherever possible; and
(g) be retained at the Permitted Installation, or other location agreed by the Regulator in writing, for a minimum period of 2 years from the date when the records were made, unless otherwise agreed in writing.

11.3 Any record not held on site shall be made available for inspection within one working week of any request by the Regulator.

Variation Notice

Schedule 2

Consolidated Environmental permit reference ***EPR/B/5.1/PWC*** as varied by this notice.