GUILDFORD BOROUGH COUNCIL

The Environmental Permitting (England and Wales) Regulations 2016
(S.I. 2016 No 1154) (As Amended)
Regulation 20

Variation Notice

To: **Guildford Crematorium**

Registered Office: **Health and Community Care Services**
Guildford Borough Council
Millmead House
Guildford, Surrey, GU2 4BB

Installation Address: **Guildford Crematorium**
New Pond Road
Godalming
Surrey
GU7 3DB

Guildford Borough Council ("the Council"), in the exercise of the powers conferred upon it by regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016[1] ("the 2016 Regulations") hereby gives you notice as follows:

1 The Council has decided to vary the conditions of permit reference **GD6** granted under regulation 13(1) of the Environmental Permitting Regulations 2010 in respect of the operation of the installation at the address detailed above.

2 The variation of the conditions of the permit and the date [s] on which they are to take effect are specified in Schedule 1 to this notice.

3 A consolidated permit as varied by this notice is set out in Schedule 2.

Signed

[redacted]
Authorised to sign on behalf of
Guildford Borough Council

Dated

22 MARCH 2017.

[1] SI 2016 No.1154

Schedule 1

Variation to the conditions of the permit
The following amendments have been made to your permit

CONDITIONS

1. **Variation Notification Procedure**

If the Operator proposes to make a change in the operation of the installation, he must, at least 14 days before making the change, notify the Regulator in writing. The notification must contain a description of the proposed change in operation. It is not necessary to make such a notification if an application to vary this permit has been made and the application contains a description of the proposed change. In this condition "change in operation" means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment.

2. **Best Available Technique**

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 facility which is not regulated by any other condition of this permit.

3. **The Permitted Installation**

3.1 The Operator is authorised to carry out the activities and/or associated activities specified in Table A.

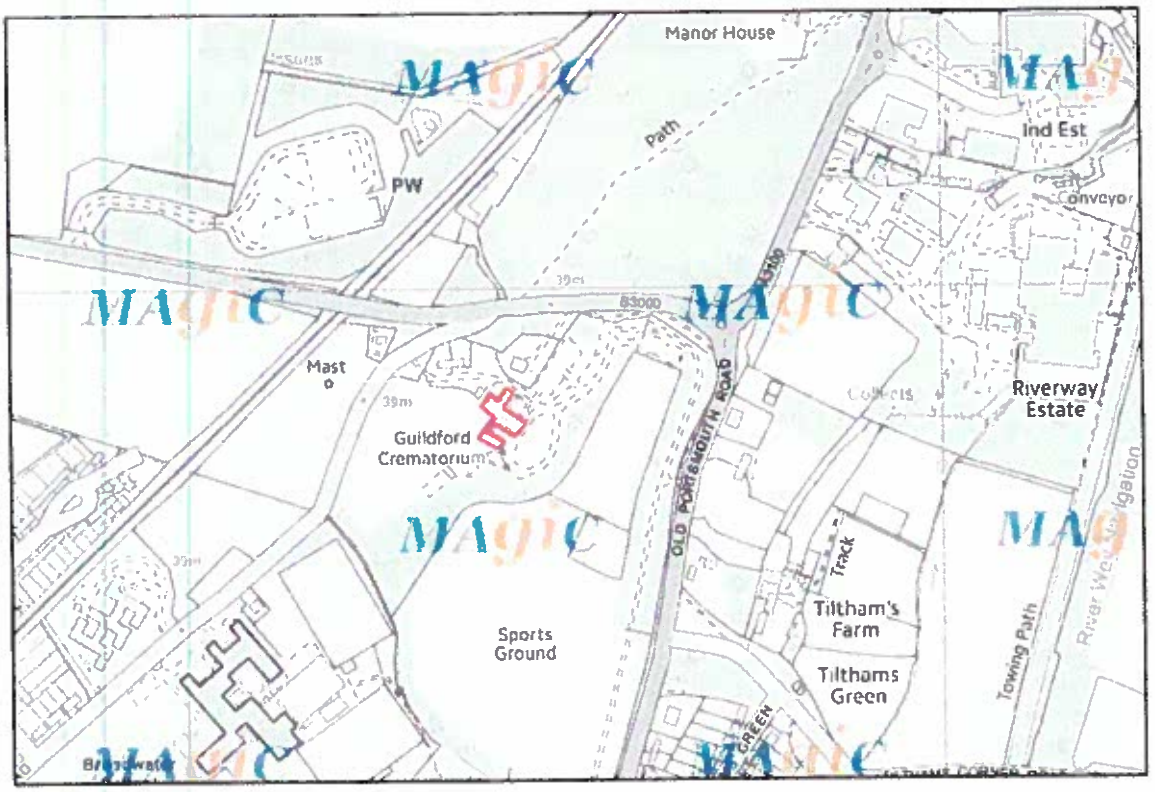
Table A

Activities under Schedule 1 of the Regulations/ Associated Activity	Description of specified activity	Schedule 1 activity Reference (if Applicable)	Limits of specified activity
Storage and handling of human remains.	Storage of human remains prior to cremation.	Directly associated activity.	Receipt and storage of human remains in coffins, caskets or shrouds.
Cremating of human remains using plant and equipment as specified in Schedule A.	Cremating human remains in coffins, caskets or shrouds designed to achieve the emission limits specified in Table B below.	Section 5.1 part B (b).	Cremating human remains with the plant listed in Schedule A only.
Removal of non-combustible residues from cremator and pulverising of calcinated remains using plant and equipment as specified in Schedule A.	Removal of calcinated remains from cremators then pulverisation using plant and equipment as specified in Schedule A then storage of same in covered containers until disposal from site. Removal of non-combustibles from cremators and storage until disposal from site.	Directly associated activity.	From removal of calcinated remains and non-combustibles from cremator to disposal from site.

3.2 The Operator is authorised to carry out the activities and/or associated activities as specified and within the boundary shown in red on the plan below:

Site plan

(Installation boundary marked in red)



EMISSION LIMITS AND CONTROLS

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

5. All emissions to air should be free from droplets.

6. There shall be no offensive odour beyond the site boundary, as perceived by the Regulator.

7. An olfactory assessment of odours shall be carried out whenever conditions are judged to be conducive to an odour event occurring. The results of this assessment shall be recorded in the logbook required to be kept in accordance with Condition 15.

8. Emissions from any combustion process shall be free from visible smoke in normal operation and in any case shall not exceed the equivalent of Ringelmann Shade 1 as described in BS 2742: 2009.

9. When the Cremator(s), as specified in Schedule A, are in use a visual assessment of emissions from the relevant cremator stack shall be made at least once a day or as determined necessary to comply with Condition 8. The results of this assessment shall be recorded in the logbook required to be kept in accordance with Condition 15.

10. Releases to air from the stacks serving the Cremator(s), as specified in Schedule A, shall not exceed the emission limits specified below in Table B.

Table B			
Abated Cremators- emission Limits, monitoring, and other provisions			
1. Substance	**2. Concentration emission limits**	**3. Type of monitoring**	**4. Monitoring Frequency**
Hydrogen Chloride (excluding particulate matter)	30 mg/m^3 Hourly average	Periodic monitoring	Annual test
Total Particulate Matter from cremator	20 mg/m^3 averaged over an hour	Filter leak monitor • Provide visual alarms & record levels and alarms • Set reference levels on commissioning (i.e. set levels at which alarms activate) **Plus** Instrument health check – i.e. service according to manufacturer's instructions **Plus** Periodic monitoring Set reference levels for continuous emissions monitor (CEM) i.e. set levels at which alarms will activate	Continuous **Plus** Annual **Plus** Every 3 years
Carbon Monoxide (for abated crematoria with multiple cremators/single abatement plant configuration)	100mg/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 test
Organic compounds (excluding particulate matter) expressed as carbon	20 mg/m^3 averaged over an hour of cremation	Periodic monitoring	Annual test
Mercury	50 micrograms/m^3	Periodic monitoring (Note 1)	Annual test
Concentration limits from cremated remains reduction plant that <u>vents externally</u> are given below:			
Particulate matter from cremated remains reduction plant that vents externally	50 mg/m^3 with no correction for oxygen concentration or water vapour	Gross filter failure detection (see Schedule B)	On commissioning and after a substantial change
Note 1: the Environment Agency monitoring guidance M2 advises that 'the choice of a suitable averaging period is strongly influenced by the expected short term variability in emission levels and whether peaks are important.' Also 'the averaging time for manual techniques is often constrained by the need for a sampling run of appropriate duration...because manual techniques have an associated analytical end method stage (e.g. weighing of particulate samples) for which a sufficient mass of pollutant must be sampled to achieve an adequate limit of detection (LOD)...' For these reasons, Regulators are advised to ensure that those undertaking monitoring liaise with the relevant analytical laboratory to determine the detection limit of the analytical method in order to obtain an estimate of the expected concentration of the monitored substance in the stack gas and calculate the sampling time required to ensure that the LOD of the sampling method is met. In any case it is not expected that the duration of sampling runs will be less than 30 minutes or longer than 8 hours.			

11. Each cremator unit must meet the criteria specified in Table C. If these requirements cannot be met, extractive monitoring of Dioxins and Furans as specified in Table C shall be required.

Table C

Combustion Provisions

Parameter	Combustion Provision	Type of Monitoring	Monitoring Frequency
Temperature	Minimum of 800°C (1073K) in the secondary combustion chamber Minimum of 850°C (1123K) in the secondary chamber when operating under emergency conditions without abatement Measuring point should be at the last measuring thermocouple.	• **Measure at the exit from the secondary combustion zone; measuring point should be at the last measuring thermocouple** • Automatically record temperatures • Visual alarm when temperature fails below 800°C • Record alarm activations • **Interlock to prevent cremator loading below 800°C**	Continuous
Residence Time	Two second residence time (minimum) in the secondary combustion chamber without correction for temp, 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 or replacement cremators
Oxygen	At the end of the Secondary Combustion Chamber: • measured wet or dry, minimum average 6% and minimum 3%	• Record of concentration at outlet of secondary combustion zone • Visual alarm and record alarm activations • During discontinuous tests, continuous reference oxygen measurements should be at the same sampling location as the parameters tested	Continuous

If the combustion provisions above are not met, then the dioxin emission limit and monitoring provision in the following row shall be applied:

Substance	Concentration emission limit/ provisions	Type of monitoring	Monitoring frequency
PCDD/F On abated processes, (on cremators that don't meet the combustion provisions above)	0.1 nanograms/m^3 as ITEQ	Periodic monitoring • Continuous monitoring of any temperature, oxygen and any flow parameters that apply during the dioxin tests, shall be undertaken concurrently. • Interlock to prevent cremator loading unless those parameters are met.	On commissioning of new or replacement cremators

12. In the case of any control system alarm event, abnormal emissions, malfunction or breakdown leading to abnormal emissions the Operator should:

a. investigate and undertake remedial action immediately;

b. adjust the process or activity to minimise those emissions; and

c. promptly record the events and actions taken in the log book required to be kept in accordance with Condition 15.

The Regulator shall be informed without delay if there is an emission that is likely to have an effect on the local community, or in the event of the failure of any key pollution control equipment.

13. The Operator shall provide a list of key arrestment plant equipment and shall have a written procedure in place for dealing with this equipments failure, in order to minimise any adverse emissions into the environment.

14. Adverse results from any monitoring activity (both continuous and non-continuous) shall be investigated immediately. The Operator shall:

a. Identify the cause and take immediate corrective action
b. Record as much detail as possible regarding the cause and extent of the problem, and the action taken by the Operator to rectify the situation
c. Re-test to demonstrate compliance as soon as possible, and
d. Notify the Regulator of the problems and actions taken to solve them, including monitoring results.

15. A log book shall be kept containing a record of all visual and olfactory assessments made in accordance with Conditions 7, 9, 12, 27 43 and 58. The record shall include the time and date of the assessments, the result, and the name of the person undertaking the assessment. The log book shall be kept available for inspection by the Regulator on the premises occupied by the installation and shall contain at least the previous two years' records.

INSTRUMENT CALIBRATION/CONFIGURATION FOR PARTICULATE CEMs

16. Calibration must be undertaken for all CEM's to ensure readings reported are correct. Before any calibration or instrument configuration is carried out it is fundamental to carry out checks that ensure the instrument is working correctly. The calibration procedure applied depends on the type of monitoring to be performed by the instrument. A filter leak device is specified for particulate matter at this crematorium. Where trigger alarms are set for quailtative instruments or filter leak monitors an output level shall be set which corresponds to around 75% of the emission limit value. Those instruments operating in qualitative mode but that have not been calibrated with an isokinetic test, and filter leak monitors that record trends are considered to be operating as indicative monitors (see Table D).

Table D: Continuous monitoring of particulate

Type of Monitoring	Information recorded by instrument	What the alarm levels can detect	Capability of instrument	Tests required on initial set up of instrument	Annual tests required	3 yearly tests required
Quantitative **See Note 1**	Mg/m^3 over time	% of ELV	Capable of being calibrated for a specific application	Functionality test 3/5 point calibration	Functionality test 3/5 point calibration	Functionality test 3/5 point calibration
Qualitative **See Note 1**	Mg/m^3 (approx) over time	Approx % of ELV	Capable of being calibrated for a specific application	Set up and 3 point calibration	Instrument health check	3 point calibration Health check
Filter leak device	Trend of plant operation over time	Change in plant operation causing a defined step change	Filter leak monitor with trend output	Set up and reference	Instrument health check	Instrument health check Set reference
Gross filter failure device	Incidence of gross failure	Catastrophic failure of filter	Instrument designed to	Set up	Instrument health check	Health check

			detect large increases in emissions	Set alarm		Set up
Note 1 – instrument response should be correlated to the results of multiple isokinetic gravimetric samples according to the standard reference method (SRM) which is typically EN-13284-1						

CONTINUOUS EMISSIONS MONITORING (all substances)

17. Continuous monitoring readings shall be displayed to an appropriately trained member of operating staff.

18. The analysers, as specified in Schedule A, shall be fitted with visual alarms, situated appropriately to warn the Operator of any high level emissions.

19. Alarm activations, when emission limits are above those specified in condition 10 whatever the time period, shall be recorded automatically in an appropriate manner (computerised or data-logger electronic record).

20. All continuous monitoring equipment shall be operated, maintained and calibrated (or referenced, in the case of indicative monitors) in accordance with the manufacturers' instructions, which shall be available for inspection by the Regulator. The relevant maintenance and calibration (or referencing, in the case of indicative monitors) shall be recorded.

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

22 Emission concentrations may be reported as zero when the plant is off and there is no flow from the stack. If required a competent person should confirm that zero is more appropriate than the measured stack concentration if there is no flow.

23. The introduction of dilution air to achieve emission concentration limits shall not be permitted.

24. The particulate monitor and logging system, as specified in Schedule A, shall be utilised to continuously indicatively monitor the concentration of particulate matter emitted in the exhaust gas from the abatement plant exhaust, as specified in Schedule A. The measurements shall be continuously recorded.

25. Emissions to air from the stack the abatement plant shall be continuously monitored for carbon monoxide using the analyser, as specified in Schedule A. Data shall be recorded at 15 second intervals or less.

26. The oxygen concentration at the outlet of the secondary combustion zone to the cremator(s) shall be continuously monitored and recorded,

27. The continuous monitoring instruments (as required by Conditions 24, 25 and 26): for monitoring Carbon Monoxide and Oxygen emitted from the abatement plant, shall be zeroed daily, *(auto cal function)* and calibrated (see Table B *or after fault repair or internal battery replacement)* using calibration gases traceable to National Standards in accordance with the manufacturer's instructions. For monitoring instruments for particulates see Table D for appropriate instrumentation tests. A record of this calibration shall be made in the log book required to be kept in accordance with Condition 15.

28. All continuous measurements shall be undertaken from the measured values from two minutes after the closing of the cremator door after loading and may continue until the removal of the calcinated remains.

29. The results of all the continuous monitoring from the abatement plant shall be recorded and retained at the crematorium for a minimum of two years and made available by the Operator for examination by the Regulator. If any records are kept off site they should be made available for inspection within one working week of any request by the Regulator.

CONTINUOUS MONITORING RESULTS REPORTING

30. Every 6 months a report shall be submitted containing continuous monitoring data for carbon monoxide. The data should be submitted covering each period of either 4 weeks or a calendar month:

    a. Values that exceed the 95% limit for carbon monoxide as specified in condition 10 in that period;

    b. 60 minute mean emission values that exceed the 100% limit for carbon monoxide specified in condition 10 in that period;

    c. A list of the highest 60 minute mean emission values for each period;

    d. The 95th-percentile value for each period.

31. For temperature and oxygen, the Operator shall report the following continuous monitoring values to the Regulator every six months:

    a. Secondary chamber entrance temperature, 4 weekly or monthly maximum and minimum (of 5 minute averages);

    b. Secondary chamber exit temperature, 4 weekly or monthly maximum and minimum (of 5 minute averages);

    c. Oxygen concentration, 4 weekly or monthly minimum (of 5 minute averages).

32. Where any values have been exceeded in any 4 weekly/monthly or 6 monthly reporting period, records should be kept that identify the number of times that the limit was exceeded during the reporting period, the levels of the exceedance, and the time, date and cremation reference. This data shall be kept available.

33. If the combustion Provisions laid out in Table C cannot be met, then the Dioxin limits specified with this table will need to be achieved and extractive monitoring of Dioxins will be required. A detailed report explaining why, if any, of the combustion provisions in Table C has not been met, shall be submitted to the Regulator.

34. The continuous monitoring results report shall take the format as outlined in the template in schedule C attached to this permit.

SAMPLING PROVISIONS

35. The Operator should ensure that adequate facilities for sampling are provided on vents and ducts:

    a. Sampling points on new plant should be designed to comply with the British or equivalent standards (BS, CEN or ISO)

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

EXTRACTIVE EMISSION MONITORING (NON – CONTINUOUS)

36. The Regulator shall be advised in writing at least 7 days in advance of any extractive emission monitoring exercise to determine compliance with the emission limit values specified in Condition 10. The provisional time and date of monitoring shall be provided along with pollutants to be tested. The methods used shall be as specified in M2 (The Environment Agency Technical Guidance Note M2 Monitoring).

37. The results of the extractive emission monitoring exercise shall be forwarded to the Regulator within 8 weeks of the completion of the sampling.

38. Emissions to air from the stacks serving the Cremator(s), as specified in Schedule A, shall be tested at least once a year for carbon monoxide, organic matter, hydrogen chloride and mercury. Total particulate matter requires annual instrument health check and periodic monitoring every 3 years. This shall be undertaken to check compliance with the emission limits specified in Table B and to ensure all the continuous analysers are functioning/reading correctly. The testing of these emissions by extractive sampling shall be undertaken in accordance the requirements of M2 (The Environment Agency Technical Guidance Note M2 Monitoring).

COFFIN MATERIALS

39. Coffins to be cremated shall not be constructed or be furnished using PVC and melamine (*It is suggested that funeral directors utilising the crematorium are regularly informed of this condition and that PVC and melamine materials are excluded from use*).

40. Cardboard coffins shall not contain chlorine in the wet-strength agent. (e.g. not using polyamindoamine-epichlorhydrin based resin (PAA-E)). (*It is recommended that funeral directors utilising the crematorium are regularly informed of this condition*).

41. Coffins to be cremated shall not contain lead or zinc. (*It is recommended that funeral directors utilising the crematorium are regularly informed of this condition*).

42. Packaging for stillbirth, neonatal and foetal remains shall not include any chlorinated plastics. (*It is recommended that funeral directors utilising the crematorium are regularly informed of this condition*).

CREMATOR DESIGN & COMBUSTION CONDITIONS

43. The Cremator(s), as specified in Schedule A, and all ductwork shall be made and maintained to prevent the escape of gases from the ductwork or cremator to the air. If excursions occur, where positive pressure gives rise to emissions, the excursion together with any corrective action taken, shall be recorded in the log book required to be kept in accordance with Condition 15.

44. Within 3 months of the date of this permit the charging system shall be interlocked to prevent the introduction of a coffin to the primary combustion zone unless the secondary combustion zone temperature exceeds that specified in Table C.

45. When re-bricking any cremator, the convolutions of the secondary combustion zone shall be maintained and the volume of chamber recalculated and restated. This is important to ensure the requirement of the residence time in the secondary chamber (as specified in Table C) is still achieved.

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

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

DISPOSAL OF RESIDUES

48. The remains in the cremator(s) shall only be moved when calcination is complete.

49. Ash and non-combustible residues from the cremator shall be removed with care to prevent dust emission via the flue

50. Cremated remains and wastes containing mercury shall be moved and stored in a covered container. Waste materials collected from inside the abatement plant shall be disposed of in the same way as waste sorbent.

51. Cremated remains treatment plant venting externally shall be abated to meet the emission limit for particulate matter in Table B and shall be tested at commissioning for verification purposes, or a performance certificate provided. The subsequent performance of the plant shall be monitored indicatively (e.g: a pressure drop indicator on the bag filter).

52. The ash processor, as specified in Schedule A, shall not be utilised without the extraction and arrestment plant fitted and operating except as permitted by Condition 12.

STACKS

53. Pollutants emitted via the stack require sufficient dispersion and dilution in the atmosphere to ensure that they ground at concentrations that are deemed harmless. The necessary stack height shall be calculated using HMIP Technical Guidance Note (Dispersion) D1.

54. The arrestment plant and bypass dump stack shall be ducted to the main stack.

55. A minimum discharge velocity, during peak times, of $15ms^{-1}$ shall be maintained for the combustion gases in the stack/s serving the Cremator(s), as specified in Schedule A.

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

57. The stack shall not be fitted with any restriction at the final opening such as a plate, cap or cowl. A cone may be used to increase the exit velocity to achieve greater dispersion.

MAINTENANCE/CREMATOR MAINTENANCE

58. All aspects of the process including all plant, buildings and the equipment concerned with the control of emissions to air shall be properly maintained. The operator shall have the following available for inspection by the regulator:

a. a written maintenance programme for all pollution control equipment
b. a record of maintenance that has been undertaken

A record of this maintenance work shall be recorded in the logbook, in accordance with condition 15, and be available for inspection by the Regulator.

59. Maintenance of the crematorium shall include the following:

a. Inspecting, repairing and replacing brick, flue, control software and hardware, monitoring equipment, abatement plant etc
b. Regular maintenance and inspection by a service engineer
c. Operator maintenance – daily, weekly, monthly, by number of cremations.

MANAGEMENT/GENERAL OPERATION

60. An appropriate environmental management system (EMS) shall be drafted for areas of the operation covered by this permit. *(This is an important component of BAT and of achieving compliance with the conditions in this permit. The EMS requires a commitment to establishing objectives, setting targets, measuring progress and revising the objectives according to results. This includes managing risks under normal operating conditions and in accidents and emergencies. This can take the form of adopting published standards (ISO 14001 or the EU Eco Management and Audit Scheme [EMAS]) or by setting up a system tailored to the nature and size of the specific process.*

61. Essential spares and consumables shall be held *(or available locally at short notice)* for the plant, or alternatively:

a. A service contract for the plant, which includes a priority attendance requirement for equipment failure, shall be held with a suitable contractor.

b. A mobile service and repair engineer, carrying essential spares and consumables is employed by the Company.

62. All staff whose duties include the operation of plant and machinery likely to either prevent or cause emission to air of any substance listed in the "Air" list of Schedule 1 part 1 of the Environmental Permitting (England and Wales) Regulations (as Amended) shall receive the appropriate training, supervision and instructions as specified in Process Guidance Note PG5/2(12) and subsequent guidance. This training is provided by the Institute of Cemetery & Crematorium Management or Federation of Burial and Cremation Authorities

63. Training of all staff whose functions could impact on air emissions from the activity shall receive the appropriate training for those functions. This shall include:

a. Awareness of their responsibilities under the permit;

b. Steps that are necessary to minimise emissions during start up and shut down

c. Actions to take when there are abnormal conditions or accidents or spillages that could, if not controlled, result in emissions

64. The Operator shall maintain a statement of training requirements for each operation post with the above mentioned functions (condition 63) and keep a record of the training received by each person. These documents shall be made available to the Regulator on request.

65. The Operator shall send the Regulator, by no later than 1 April each year, a certificate issued by the CAMEO Burden Sharing Scheme or appropriate evidence from a comparable audited burden sharing arrangement or scheme[1] which specifies, (excluding those cremations involving stillbirths, perinatal deaths, and deaths of infants under 5 years old):-

a. the total number of cremations in the previous 12 months; and

b. the number of cremations undertaken in the previous 12 months in cremators fitted with operational mercury abatement equipment; or

c. the proportion of cremations undertaken in the previous 12 months subject to burden sharing arrangements under which money is paid for the benefit of abated crematoria; or

d. in cases where operational mercury abatement equipment is fitted but fewer than 50% of cremations at the installation were undertaken in cremators fitted with such equipment in the previous 12 months, the relevant information in both b) and c).

66. The flue gas treatment plant shall be operated and maintained in accordance with the manufacturers operating and maintenance instructions.

67. In the event of the use of a bypass /emergency release vent (ERV) during cremation: the failure, its cause and cure shall be entered into the log book and the Regulator shall be notified immediately (preferably by fax or email). Repairs are expected within 24-48 hours.

68. Bypass /ERVs shall only be used when the heat removal plant has failed and the abatement plant would be damaged, or during warm-up and shut-down, provided that compliance is demonstrated with the carbon monoxide limit. Repairs are expected within 24-48 hours.

69. Adequate checks shall be made to ensure the abatement plant dosing system has sufficient reagent for the day's operation and is feeding the recommended reagent satisfactorily. A record

[1] Statutory guidance is produced as PG5/2(12). Paragraphs 4.28 to 4.32 set out the burden sharing options

shall be kept of the quantity of reagent used which shall be retained at the crematorium for a minimum of two years and made available by the Operator for examination by the Regulator.

70. Adequate checks shall be made to ensure that there is sufficient room in the reception drum for the spent reagent. The drum shall remain sealed except as required by checking and maintenance procedures. Dusty materials, dusty wastes and wastes containing mercury shall be kept tightly contained.

GAS USAGE AND CARBON DIOXIDE EMISSIONS

71. The Operator shall begin to keep simple records of quarterly gas consumption for inspection by the Regulator. Consumption should be converted into CO_2 equivalent emissions using the following conversion equation (at time of publication of this note the conversion factor was 0.1836. However this figure will require checking by the Operator using published figures):

Gas usage (kWh) X conversion factor = $kgCO_2e$ (see DEFRA website for current conversion factor)

CREMATION STANDARDS IN THE EVENT OF MASS FATALITIES

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

End of Conditions

SCHEDULE A: EQUIPMENT TYPE AND SPECIFICATION

Schedule A		
Equipment Type	Specification	Number of Units
Cremator	ATI CR2000 Cremator	1
Cremator	ATI CR2000XL Cremator	1
Cremulator (Ash Pulveriser)	Facultatieve High Speed Cremulator	1
Ash transfer cabinet	Manufactured by Facultatieve Technologies	1
Gas Analysers	At exit to secondary chamber electrochemical cell based analyser for O_2. At exit of abatement plant, Ultramat 23 (oxygen and carbon monoxide)	2x Electro chemical cell analysers. 1x Ultramat 23
Particulate Monitor	SEFRAM SPX150 particulate monitor	1
Flue Gas Treatment Plant	Reagent dosing station, and dry scrubbing filtration system, including reverse air jet bag filtration unit.	1
Control System	SCADA based computer interface, IBM PC	1

SCHEDULE B - SAMPLING PROTOCOL

Continuous and/or extractive sampling of for the pollutants/ substances specified in table B and C shall be carried out in accordance with the test methods suggested in Section 4 of PG5/2(12) and within schedule B below.

Schedule B		
Substance	**Emission Testing Method**	**Emission Testing Method**
Particulate Matter (averaged readings taken over operating periods, excluding start-up and shutdown)	BS EN 13284 part; 1 (for particulate matter below 50 mg/m^3) BS ISO 9096: 2003 (for particulate matter above 50 mg/m^3)	Or as specified in Environment Agency Technical Guidance Note M2, whichever is more recent.
Hydrogen Chloride	BS EN 1911; parts 1 to 3	As above
Organic Matter (excluding particulate matter)	BS EN 12619; up to 20 mg/m^3 BS EN 13256; over 20 mg/m^3	As above
Oxygen	BS EN 14789	As above
Carbon Monoxide	BS EN 15058	As above
Polychlorinated dibenzo-p-dioxins and furans	BS EN 1948; parts 1 to 3 and MID	As above
Mercury	BS EN 13211	As above

1. The Operator shall provide adequate facilities for sampling are provided on relevant ducts or vents.

2. Sampling shall be undertaken from the four-inch BSP sockets on the horizontal ducting to each of the cremator(s) ducts.

3. Any changes, improvements or modifications to the location and design of the monitoring platform and associated sampling points shall be in accordance within the requirements defined in the 'M1 Sampling Requirements' document (Environment Agency)

4. The results obtained for the annual extractive sampling shall be utilised to indicate the correlation between the measured levels of this extractive equipment with those of the continuous, in-situ emission monitoring equipment. If deviations are identified, corrective action shall be taken as soon as possible.

5. The Regulator shall be informed of any intended deviation from the above methods.

6. The reference conditions for limits in Table B are 273.1K, 101.3kPa, 11% oxygen v/v, dry gas unless otherwise stated.

SCHEDULE C- CREMATOR REPORTING TEMPLATE

Monthly report for [crematorium name]
Cremator number [ ]
Report for the month starting [date] Total number of cremations =

Table 1: Combustion Provisions – 5 minute average

	PG5/2 Criteria	Average value for period	Minimum value	Maximum value

Secondary Chamber Start Temperature °C	850°C unabated 800°C abated			
Secondary Chamber End Temperature °C	850°C unabated 800°C abated			
Oxygen % measured wet or dry	Average 6% Minimum 3%			N/A

Table 2: 95th percentile emission value for the period

Substance	95 percentile mg/m3
Particulate matter unabated cremators only	
Carbon monoxide all cremators	

Table 3: Values that exceed the 95% limit (60 minute average) for:
Carbon monoxide and particulate on unabated plant
Carbon monoxide on abated plant operating to emission levels in PG5/2 (12) Table 4 item 4b

Parameter	Value	Date	Time

This table to be left blank for abated plants operating to PG5/2 (12) Table 4 item 4a

Table 4: 60 minute mean emission values that exceed 100% limit for carbon monoxide on all plants and particulate for unabated plant

Parameter	Value	Date	Time

For abated plant CO 60 minute mean emission value is the average of 2 x 30 minute means given in cremation report

Table 5: Highest 60 minute mean emission value for the period

Parameter	Value	Date	Time
Carbon Monoxide (all cremators)			
Particulate (unabated cremators only)			

Table 6: Limit exceedances during the period

Number of secondary inlet temperature excursions below limit [Count]
Number of secondary outlet temperature excursions below limit [Count]
Number of Oxygen excursions below limit [Count]

Exceedances
Secondary Chamber Temperatures 5 minute average below the minimum limit (850°C unabated plant; 800°C abated plant)

Oxygen wet or dry 5 minute averages below 3% wet or dry 60 minute averages below 6%

Parameter	Value	Date	Time	Cremation Number

End of Permit

The above variations take effect immediately

Signed

[redacted]

[redacted]

Authorised to sign on behalf of
Guildford Borough Council

The Regulator Contact Details

Guildford Borough Council
Health and Community Care Services
Guildford Borough Council
Millmead House

Guildford
Surrey
GU2 4BB

Tel: 01483 444371

www.guildford.gov.uk

E-mail: HCCS@guildford.gov.uk

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 EP General Guidance Manual at http://www.defra.gov.uk/environment/quality/pollution/ppc/localauth/pubs/guidance/manuals.htm.

Dealing with a 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.

Offences

Failure to comply with a Variation Notice is an offence under regulation 38(2) 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.

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 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 the Secretary of State or Welsh Minister with the following (see paragraphs 2(1) and (2) of Schedule 6 of the 2010 Regulations):

- 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.

Where to send your appeal documents
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

Or for appeals in Wales:

The Planning Inspectorate
Crown Buildings
Cathays Park
CARDIFF
CF10 3NQ

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.

Confidentiality
An operator may request certain information to remain confidential, ie 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 EP 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.

Schedule 2

Consolidated Permit Reference **GD6-P1** follows: